

Running head: ASSESSMENT OF SERMC'S EFFORTS TO BECOME A SFO

An Assessment of the Southeast Regional Medical Command  
as a Strategy Focused Organization

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## Abstract

In 2001 the United States Army Medical Department (AMEDD) adopted the Balanced Scorecard (BSC) as the central component of its strategic management system. Subordinate regional medical commands were directed to develop supporting scorecards (Peake, 2001). The SERMC accomplished this task in late 2001 and has since worked to incorporate the scorecard into their daily business. The purpose of this study was to perform an analysis of SERMC's efforts to use the BSC to become a Strategy-Focused Organization (SFO). A survey based on the five principles of a SFO (Kaplan & Norton, 2001) was used to gather feedback from employees throughout the region. It was hypothesized that various demographic groups within the region are underserved by current BSC implementation efforts. An analysis of 749 responses supported this hypothesis, revealing significant differences ( $p < .05$ ) in six demographic categories (Organization of Assignment, Rank, Duty Status, Professional Discipline, Organizational Level, and Tenure). A significant relationship ( $p < .001$ ) was also found between a respondent's knowledge of the BSC and their belief that their organization was strategically focused. These results were used to make recommendations to refine and improve current BSC implementation practices within the SERMC.

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An Assessment of the Southeast Regional Medical Command (SERMC)  
as a Strategy Focused Organization (SFO)

Introduction

The Balanced Scorecard (BSC) is a strategic management system originally proposed by Drs. Robert S. Kaplan and David P. Norton in a 1992 *Harvard Business Review* article (Kaplan & Norton, 1992). The BSC was the result of a yearlong research project Kaplan and Norton conducted in 1990 with 12 leading companies in the area of performance measurement (Kaplan & Norton 1992). The genesis of the BSC was the idea that managers should not have to choose between financial and operational measures. The result was a tool (the BSC) that allows managers to check a few critical measures that are linked to the organization's strategic objectives, and balance the need to monitor financial and operational measures. Similar to the ideas expressed in Senge's The Fifth Discipline: The Art and Practice of the Learning Organization (1990), the BSC is meant to focus the entire organization on the organization's strategy by using mental models (i.e. strategy maps) to ensure employees embrace a systems perspective. In the BSC that systems perspective is represented by objectives, measures, and targets allocated to four perspectives: financial, customer, internal business, and innovation and learning (Kaplan & Norton, 1996). Organizations that adopt the BSC as their management system are able to assemble and link many disparate organizational elements and guard against sub optimization (the idea that achievement in one business area comes at the expense of another business area)

(Kaplan & Norton, 1992). The effect on an organization is that their management system does not produce countless measures with a control bias - i.e. measures that specify what actions an employee should take. Instead the BSC produces a few high-level measures that put an organization's vision and strategy at the center of the management system. Managers and employees are then encouraged to take action and develop plans to achieve stated strategic objectives and ultimately move the entire organization toward its desired vision (Kaplan & Norton, 1992).

The BSC may not be a cure-all for ailing businesses, and 20 years from now it may be remembered as another management fad, but by 1999 an estimated 40% of Fortune 1000 companies had implemented some form of a BSC (Anonymous<sup>3</sup>, 1999). In their books and articles, Kaplan and Norton recounted the efforts and successes of Rockwater, Apple Computer, Advanced Micro Devices, Mobil, CIGNA, Intel, 3M, AT&T Canada, and many other companies that implemented a BSC. Conspicuously absent were accounts of the use of the BSC in the health care industry. Then in the late 1990s articles began to appear about hospitals, health systems, and academic health centers that were implementing a BSC management system. Perhaps the most impressive account was published by Dr. Jon Meliones, Chief Medical Director of Duke Children's Hospital (DCH) (Voelker, Rakich, & French, 2001). His article chronicled the complete turn-around, both financial and clinical, of DCH through the use of the BSC. The success of DCH and others created a great deal of interest in the BSC within the healthcare industry. This interest led the Surgeon General of

the Army, LTG James B. Peake, to adopt the BSC as the major component of the U.S. Army Medical Command (MEDCOM) strategic management system.

#### Conditions which Prompted the Study

On 29 May 2001, LTG Peake signed the MEDCOM implementation plan for the BSC (Peake, 2001). The plan reports the approval of the Army Medical Department (AMEDD) BSC on 16 April 2001 and directs the development of BSCs in each regional medical command (RMC) within the MEDCOM. LTG Peake's stated intent is to use the BSC to focus and communicate his strategy throughout the AMEDD. By requiring each RMC to develop a BSC that is aligned with the AMEDD BSC, he can insure that resources are allocated to new initiatives that will achieve the AMEDD's strategic objectives. LTG Peake set an aggressive implementation timeline (see Appendix A), culminating in the submission of RMC BSCs to MEDCOM by 31 August 2001. Subsequently, the Chief of Staff of the Army, GEN Erik K. Shinseki, adopted the BSC as the key component of new Army Strategic Readiness System (SRS).

Great Plains Regional Medical Command (GPRMC) and Fort Leonard Wood Army Community Hospital (FLWACH) were the first RMC and medical treatment facility (MTF), respectively, in the AMEDD to develop BSCs in support of the AMEDD BSC. They were the pilot sites for RMC and MTF BSC development, and served as examples for other RMCs and MTFs to follow. LTG Peake directed each RMC to form a work group to develop their regional strategy map and scorecard. To assist the RMCs, MEDCOM Program Analysis and Evaluation (PA&E) provided each work group leader with

instructions and supporting documents based on the development of the BSCs at the two pilot sites.

The Southeast Regional Medical Command (SERMC) consists of a regional headquarters, one Army Medical Center (MEDCEN), six Army Medical Activities (MEDDAC), and three health clinics. The regional headquarters and the MEDCEN are co-located at Fort Gordon, GA and the three health clinics are subordinate to the MEDCEN. The other six MEDDACs are spread throughout the southeast United States. In response to the MEDCOM BSC implementation plan, SERMC began development of a regional BSC and seven (one MEDCEN and six MEDDACs) MTF BSCs. The regional working group began developing the regional BSC in April 2001 under the guidance of LTC Darrell Hanf. Using the development tools provided by MEDCOM PA&E, they established a work schedule that would result in a completed BSC by the end of July 2001. However, this represented only the first step (development of a strategy map and scorecard) in the implementation of the BSC as a strategic management system. Subsequently, SERMC would have to develop subordinate strategy maps in their MTFs and supporting staff elements, communicate the organization's strategy to every employee, require the development of action plans and initiatives to support the stated strategic objectives, and then take action to ensure organizational structure and governance supported the articulated strategy.

To date, LTG Peake has approved the SERMC scorecard, the SERMC commander has approved all seven subordinate MTF scorecards, and the steps to fully implement the BSC as a

strategic management system are on going. The current emphasis within the organization is to operationalize the strategy that the BSC articulates. Regional leaders are trying to assess the current state of BSC implementation within the region and then determine how the objectives and measures on the BSC can effectively drive employee's day-to-day activities. SERMC is currently at a crucial point in BSC implementation. Dr. Kaplan points out that the major threat to an organization successfully implementing the BSC is the failure to develop processes that support its scorecard, not a poorly designed scorecard (Kaplan, 1999). If an organization is committed to continuous learning and growth, the scorecard design can always be adjusted in subsequent reviews. However, if an organization does not develop processes to ensure that its scorecard is a strategic management system relevant to every employee in the organization rather than a measurement tool for senior leaders, it will not be successful.

#### Statement of the Problem

SERMC must assess current implementation efforts within the region to ensure that the BSC becomes an effective strategic management system. RMC leadership must gather feedback about BSC implementation from the regional staff and subordinate MTFs in order to assess current efforts. A tool and/or a process is needed to facilitate the collection of attitudes, opinions, and perceptions about BSC implementation. With sufficient and significant feedback, regional leadership can identify barriers to and deficiencies in BSC implementation. Then they can make changes to ensure identified barriers are overcome and

deficiencies are corrected.

### Literature Review

The Balanced Scorecard was originally developed for use in the for-profit, business world as a measurement system (Kaplan & Norton, 2001). Kaplan and Norton's original study was sponsored by the Nolan Norton Institute, which is the research arm of the consulting firm KPMG (Kaplan & Norton, 1996). Observations and conclusions from that study focused on the fact that even for-profit businesses could not achieve continued success by solely focusing on the bottom line. Traditional financial measures were acknowledged as retrospective and as the business environment became more competitive, prospective measures were needed to focus businesses on the future. To address this need, Kaplan and Norton developed the Balanced Scorecard to provide executive leadership with a fast but comprehensive view of their organization (Kaplan & Norton, 1992). The original scorecard contained traditional financial measures complemented by operational measures in the domains of customer satisfaction, internal processes, and innovation and improvement (Kaplan & Norton, 1992). The operational measures represented a company's intangible assets (knowledge, employee skills, motivation, use of information systems, etc...) that could not be captured with financial measures. The underlying idea, is that the financial results seen in quarterly or yearly reports are a reflection of operational processes/activities that will "drive" or "cause" future financial performance. Because financial measures are retrospective they only indicate failure or degradation of

operational processes/activities after the fact. Organizational leaders must have real time visibility of these operational processes/activities to adequately manage their business and ensure future, positive financial results.

Several companies adopted the BSC method proposed in Kaplan and Norton's original work. However, as innovative companies put the BSC method into practice, the measurement tool evolved into a strategic management system (Kaplan & Norton, 1996). Companies found that the most important benefit the tool offered, was the ability to communicate and implement a single strategy. The measures incorporated into an organization's scorecard could be linked together in "cause-and-effect" relationships to support identified strategic objectives. In turn, the strategic objectives are the basic components of a central strategy that allows the organization to achieve its vision. This is similar to the idea of shared vision articulated by Peter Senge in the late 1980s and early 1990s (Senge, 1990), but Kaplan and Norton provided a detailed method for linking vision and strategy to daily work activities and developed tools for organizations to utilize. As more organizations adopted the BSC as their strategic management system, Kaplan and Norton assembled the collective body of experience with the BSC (as well as their own thoughts and experiences) into their 1996 book, The Balanced Scorecard. However, this book contains virtually nothing about the use of the BSC in healthcare organizations. Even though the BSC had evolved significantly since its introduction, it still identified financial objectives as the ultimate outcome of a

business. Strategic objectives and supporting measures in the other three perspectives were intermediate steps to achieving financial success.

The fact that a management system designed for for-profit businesses in general industry was not readily used in the healthcare industry should be no surprise. Traditionally, healthcare has been different from any other industry. The charitable and religious origins of hospitals coupled with the sovereignty of the medical profession restricted competition, limited government regulation, and gave physicians the authority to determine what standards govern medical work (Starr, 1982). Physicians did not select the financial margin of a hospital as the standard by which health care is evaluated. Government and industry efforts to control escalating medical costs placed more emphasis on financial measures in healthcare and resulted in the advent of managed care and increased competition within the healthcare industry. However, differences between the healthcare industry and other industries still remain. The risk of uncertainty (i.e. uncertain outcomes of illness), insulation of consumers from the costs of healthcare, information asymmetries between healthcare providers and patients, the role of not-for-profit organizations, and the rapid pace of technological change create unique challenges for healthcare managers (Lee, 2000). Further, the idea of medical care as a social good rather than a market good leads many providers, administrators, consumers, and legislators to discount the fiscal bottom-line as a strategic driver. The result is that the healthcare industry is generally

slow to adopt management trends and practices from general for-profit industry, and when they are adopted they are usually not linked to organizational strategic planning efforts.

Continuous Quality Improvement (CQI) is a prime example. The basic CQI philosophies introduced by Deming, Juran, and Crosby (Longest, Rakich & Darr, 2000), have become the basis for quality management, quality assurance, and process improvement efforts in healthcare. The principles of CQI were first applied by organizations in Japan, then adopted by for-profit industry in America, and finally gained acceptance in healthcare in the 1990s (Longest, Rakich & Darr). Since then, organizations like the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) and the National Committee on Quality Assurance (NCQA) have forced the healthcare industry to internalize CQI principles by incorporating them in their accreditation and quality measurement systems. However, quality and process improvement efforts may not be aligned with an organization's strategic objectives, and do not aggregate into an effective strategic management system. Kaplan and Norton assert that organizations employing CQI management philosophies usually lack a central focus for their disparate improvement efforts and often fail to link these improvements to financial and customer measures (Kaplan & Norton, 1996).

Similar problems exist with measurement and assessment models specifically designed for healthcare. Two prominent examples are the Cost-Quality-Access model used to assess healthcare systems and Donabedian's Structure-Process-Outcome

model used to assess quality in healthcare. Health services analysts frequently use the triad of Cost, Quality, and Access to assess healthcare in this country (Barton, 1999). The basic idea is that access to healthcare, the costs of healthcare, and the quality of healthcare are all related, like the three corners of a triangle. In this model, sometimes referred to as the "Iron Triangle", quality is not assessed in a vacuum. Quality measures are balanced with financial (cost) and customer (access) measures. Like the Balanced Scorecard, the "Iron Triangle" simultaneously focuses on multiple measures in distinct domains to avoid sub optimization. But this model, like CQI, is not generally used as an effective strategic management system. The exact functional relationships that link the corners of the "Iron Triangle" are difficult to define, so this model is most often used in a general sense to assess the status of a national health system and not the status of a particular hospital or healthcare organization. It is difficult to cascade the system-level values represented in the "Iron Triangle" down to an individual organization where they can drive the day-to-day business of healthcare.

Donabedian's model has also fallen short of becoming a strategic management system. Avedis Donabedian proposed that quality in healthcare is generally assessed using three types of measures: structural, process, and outcome measures. Structural measures examine the tools and resources available to providers and health care organizations. Process measures focus on the activities within healthcare organizations and the interaction

between providers and patients. Outcome measures assess changes in a patient's health status that can be attributed to healthcare (Longest, Rakich & Darr, 2000). Donabedian's model stresses that there are links between these three types of measures. The ultimate outcome, a healthier patient, is the synergistic result of an appropriate structure supporting quality processes that lead to efficacious healthcare. Like the BSC, Donabedian's model forces organizational leaders to focus on more than one measure and provides cause and effect links between these measures. However, Donabedian's work has been relegated to use in the fields of quality control/management and organizational behavior. It has not been widely used in the field of strategic management and does not appear in many (if any) strategic management textbooks.

Total Quality Management (TQM), Management by Objectives (MBO), Business Process Reengineering (BPR), and Hoshin planning are other management philosophies used to improve quality in healthcare (Longest, Rakich & Darr, 2000). All of these management techniques were first used in general industry. Various businesses used these techniques to manage human resources or internal processes, but in the 1990s they then turned to the Balanced Scorecard as a superior management system. Why were healthcare organizations not doing the same thing? The design and early evolution of the BSC delayed this for several years. Kaplan and Norton's original work stressed financial perspective objectives as the ultimate outcome of an organization's strategy. The operational measures in the

remaining three scorecard perspectives were causal factors that led to the accomplishment of the financial objectives and "balanced" the organization's focus. In healthcare, the overriding focus of management was on quality processes and customer (i.e. health) outcomes. For most healthcare organizations, the idea that financial measures were the leading indication of strategic success was incongruous with their focus on quality processes and customer outcomes. Further evolution of the BSC was required before it could be used in healthcare.

The impetus for this evolution was the recognition by healthcare executives that they were in a period of rapid change. Increased competition in the healthcare industry led to the development of integrated health systems that were more complex than traditional freestanding hospitals or physician practices (Curtwright, Stolp-Smith, & Edell, 2000). The proliferation of various managed care contractual arrangements challenged managers to develop new ways to motivate and guide employees. Increased government regulation and falling Medicare and Medicaid reimbursement rates added to the tumultuous nature of the industry. Healthcare executives began to look for ways to navigate the turbulent seas of change and lead their organizations to solid ground. Many of them latched onto the Balanced Scorecard, realizing that it was most appropriate for organizations in turbulent industries (Voelker, Rakich, & French, 2001).

Early experimenters in healthcare such as the Yale school of medicine developed their scorecards and strategy maps like

general industry; with learning and growth, internal process, and customer measures supporting the financial measures at the top (Rimar & Stanley, 1999). Others like the Mayo Clinic used the general methodology of the Balanced Scorecard, but developed their own unique measurement domains or perspectives (Curtwright et al ., 2000). Still others specified intermediate clinical outcome measures to support customer outcome measures and redefined the traditional financial domain so it focused on "return on investment" (Santiago, 1999). But none of these represented the key change that would lead to widespread use of the BSC in healthcare.

The breakthrough came from a combination of innovation within the healthcare industry and the incorporation of lessons learned by government and not-for-profit organizations. Kaplan and Norton's second book, The Strategy Focused Organization (2001), details modifications to the architecture of the Balanced Scorecard that made the difference. Basically, organizations reordered the four BSC perspectives and produced strategy maps that subordinated or equated financial measures to other operational measures. In government and not-for-profit organizations, the financial perspective was usually placed at the bottom of the strategy map and the customer perspective was placed on top. Choosing this less traveled road has made all the difference. The strategy map is essentially the mental model of the Balanced Scorecard. As long as the financial perspective was on top, the mental image of the BSC was incompatible with the mission-focused mental image of government and not-for-profit

organizations. Once the mental image of the BSC was altered, the barrier to successful BSC use in these organizations was removed. Kaplan and Norton chronicle the best strategic applications of the BSC by these organizations in their most recent book. The authors trumpet the use of the BSC at Duke Children's Hospital (DCH) and Montefiore Hospital in the Bronx, New York as superior (Kaplan & Norton, 2001). In both of these organizations, financial objectives were not placed at the bottom of the scorecard strategy map, but were made equal to the customer objectives. Both organizations are part of not-for-profit, academic health centers. They did not view their financial bottom-line as their primary outcome, but they realized that all of their other efforts depended on maintaining financial viability. Dr. Meliones, from DCH, recounts how the employees at DCH came to this realization and adopted the mantra, "no margin, no mission" (Meliones, 2000). This is the basic understanding that brought together clinicians and administrators, rallied them around the organization's BSC, and transformed DCH into a strategy focused organization.

Dr. Meliones brought this message to the AMEDD at the May 2001 Senior Leader's conference. The AMEDD took note of the lessons learned at DCH, Montefiore Hospital, and other government and not-for-profit organizations when they designed the AMEDD Balanced Scorecard. The approved scorecard places the financial perspective at the bottom of the strategy map, an indication that in government healthcare financial processes support and enable the internal processes that are used to deliver healthcare to our

customers. With this architectural shift in place, the AMEDD scorecard was cascaded down to the GPRMC and LWAMC pilot sites, and then to all of the RMCs.

Time will tell if the decision to move the financial perspective to the bottom of the scorecard is the correct way to articulate the AMEDD's strategic objectives. But the design of the scorecard is much less important than the processes that are built into the organization during implementation (Kaplan, 1999). In their latest book, The Strategy Focused Organization, Kaplan and Norton (2001) identify five principles that constitute a consistent pattern to achieving strategic focus and alignment:

- Mobilize Change through Executive Leadership
- Translate the Strategy to Operational Terms
- Align the Organization to the Strategy
- Make Strategy Everyone's Everyday Job
- Make Strategy a Continual Process

They observed these five principles in the most successful organizations that used a BSC management system. Each one of these principles is a fundamental step organizations must take on their journey to becoming a strategy-focused organization (SFO). Dr. Norton (2002) further defined the path to BSC success when he placed the five common principles of a SFO into three distinct phases (see table 1). The SERMC is in

Table 1 - Phases and Principles of BSC Implementation

Phases of BSC Implementation	Principles of a Strategy-Focused Organization
Phase I - Mobilization	Mobilize change through executive leadership
Phase II - Design and Rollout	Translate the strategy into operational terms Align the organization to the strategy
Phase III - Sustainable Execution	Make strategy everyone's job Make strategy a continual process

the middle of this process right now (somewhere in Phase II), and is working to cascade the scorecard throughout the organization, relate scorecard objectives and measures to individual employees, and build structure to facilitate and sustain scorecard use. Regional leaders refer to this as "operationalizing" the scorecard. However, simply knowing these phases and principles is not enough. A great deal of hard work and perseverance is necessary to drive an organization through the building and implementation of a BSC management system. Studying other organization's use of the BSC may help regional leaders avoid common mistakes during this effort.

The literature is full of examples of organizations that developed good scorecards and then encountered problems implementing them. It is estimated that 70% of the organizations that choose to adopt a Balanced Scorecard fail during implementation (Voelker et al ., 2001). In a two-part article published in 1999, Dr. Kaplan distilled many of the problems he has observed into six common implementation pitfalls:

- Senior management is not committed

- One senior manager tries to build the scorecard alone
- Scorecard responsibilities do not filter down from the corporate level to divisions, business units, and departments
- Treating the scorecard as a one-time event
- Mistaking the BSC for an automation systems project
- Introducing the BSC only for determining compensation

The SERMC has to this point avoided the first two pitfalls, but the final four loom large as the region struggles to operationalize the scorecard. However, these are just some of the most common problems encountered by companies throughout general industry. A study of BSC use within healthcare organizations reveals more specific pitfalls that the region must avoid.

Jones and Filip (2000) report that healthcare organizations must be careful not to plan every detail. The scorecard must articulate the organizations strategy in a way that encourages initiative and adaptation at lower levels instead of prescribing behavior. The professionals that work in healthcare facilities are highly educated and would not respond well to a system that controls their actions rather than inspiring and guiding their efforts. Worrying about incomplete or missing measures may be a sign that BSC development is too detailed. In a recent interview, Dr. Kaplan himself stated that organizations should not get caught up on missing measures (IQPC & Kaplan, 2002). Instead, organizations should be satisfied with defining 75% of their initial measures and then let the others develop as

subordinates take ownership of scorecard objectives. Over time the scorecard will change as the organization adapts and grows. Dr. Kaplan also stresses that in government and not-for-profit organizations a focus on short-term results may present a problem. Goals in these organizations may be very broad, long-term goals that require intermediate output measures and a different perspective on time (IQPC & Kaplan). Voelker et al. (2001) also identify time as a possible barrier, but add that the complexity of healthcare, the cost of implementation, and initial resistance from staff members are also common problems.

Because healthcare is a complex business and implementation takes a long time (estimates range from 16 weeks to 2 years), senior leadership must be committed (Curtwright et al ., 2000). However, commitment is not enough. Weber (2001) notes that healthcare leaders must have a common understanding of the organization's strategy before any BSC implementation effort can succeed. Once leaders reach a common strategic understanding they begin to use the BSC to articulate that strategy. At this point problems arise with addressing multiple audiences (Curtwright et al .), defining and articulating the value that health services provides to stakeholders (MacStravic, 1999, Curtwright et al .), using "business-speak" to communicate with clinical staff (Rimar & Gartska, 1999, Meliones, 2000), and the use of too many measures (Anonymous, 2000). But even when this minefield of failure is navigated successfully, Grint (1997) warns that failure may be snatched from the jaws of victory if the organization becomes focused on the success of the tool

instead of using the tool to focus on the success of the organization.

In a very recent article Inamdar and Kaplan (2002) present a more complete picture of the challenges healthcare organizations face. They interviewed leaders in nine different healthcare organizations, then categorized and compiled the most common responses. Questions and responses addressed the motivation to adopt the BSC, organizational experiences with implementation, and results from implementation. The article concludes by providing guidelines for successful BSC implementation in healthcare organizations. It is inferred that the probability of success may be increased if other healthcare organizations incorporate these guidelines into their BSC implementation efforts. Although there is no statistical proof that the use of the authors' guidelines will increase the chances of BSC success, this study implies the basic premise that feedback from various BSC implementation efforts can be used to improve an organization's current implementation efforts. Stated simply, an organization may learn from the mistakes and successes of others.

This premise is supported by the current practices of the Balanced Scorecard (BS) Collaborative, a BSC professional services firm started by Kaplan and Norton. They use surveys to gather feedback about the BSC implementation efforts of their clients. One survey I obtained from BS Collaborative, used Likert scale questions to better understand how clients were using the BSC to become strategy-focused organizations (Balanced Scorecard Collaborative, 2002). BS Collaborative uses the

results from that survey to refine the services and advice they provide to their clients. They hope that the use of feedback increases their client's probability of successful BSC implementation. Their approach demonstrates the utility of survey instruments in gathering feedback to guide and refine BSC implementation efforts.

Within the AMEDD, a study conducted by West and Holt (2002) and an unpublished manuscript by Mr. John Defrank (2002) provide the closest examples of surveys that assess strategic management system implementation. West and Holt used a survey to establish a pre-implementation baseline for and assess assumptions used in the AMEDD's Activity Based Management (ABM) Initiative. They developed a survey instrument based upon current literature and collected information about the MTF operating environment in terms of change readiness, individual commitment, decision-making, use of information, communication, performance measurement, rewards, and ability to work together. Although this survey does not specifically mention nor collect information about AMEDD efforts with the BSC, it provides good background information on survey instrument development.

Defrank (2002) used an existing survey to examine four factors of organizational alignment within the U.S. Army Center for Health Promotion and Preventive Medicine (USACHPPM). Survey questions were divided into the areas of strategy, customers, processes and people. Again, the survey questions did not gather specific feedback about BSC implementation efforts, but the results are pertinent because organizational strategic alignment

is one of the objectives of the BSC methodology. Defrank (2002) concludes that the BSC is an effective tool for achieving organizational alignment, but he also offers recommendations to improve the use of the BSC within the AMEDD. While this manuscript and the article by West and Holt are helpful, they neither evaluate BSC implementation efforts within the AMEDD nor suggest a framework to evaluate these efforts.

Terry S. Brown (2002), vice president of manufacturing and process industry practice for Balanced Scorecard Collaborative, offers such a framework. His article provides a process for evaluating, "...an organization's readiness to undertake the change required to become a Strategy-Focused Organization and achieve breakthrough results (Brown, p. 12)." While his article focuses on a prospective assessment that should be used prior to implementing a BSC management system, at the end of the article Brown offers a SFO Assessment Checklist geared more toward an "in-progress" assessment. This checklist is based on the five principles of a SFO identified by Kaplan and Norton in their latest book. A survey instrument based on the five principles of a SFO, Brown's checklist, and common points of success or failure found in the literature may be developed to assess current implementation efforts within SERMC. Information obtained from such a survey could be useful in refining and guiding BSC implementation within SERMC.

#### Purpose

The purpose of this study was to provide regional leadership with recommendations for refining and improving current BSC

implementation efforts. A survey instrument (Appendix B) was developed to collect information about the use of the BSC within the region and the extent to which this use has helped SERMC to become a Strategy-Focused Organization. The data from the survey was analyzed to identify specific areas of BSC implementation that may be improved. Likert scale attitude/opinion questions were used to obtain dependent variable scores that represent the level of success of SERMC BSC implementation efforts according to the five principles of a SFO. Six demographic independent variables (operationally defined in table 2) were collected through multiple choice single-response scale questions. The alternate hypothesis is that the degree of successful BSC implementation represented by the dependent variables will vary widely based on group membership within the demographic categories. The null hypothesis is that BSC success will not differ for any of the demographic variables. Additionally, a verbal anchor numeric scale question was included that asked each respondent to rank their familiarity with the BSC from one (very unfamiliar) to seven (very familiar). This "familiarity score" was used as an independent variable to verify the assumption that familiarity with your organization's BSC positively influences the dependent SFO principle scores.

Table 2 - Operational Definitions of Independent Variables

Variable Name	Operational Definition
<b>Organization</b>	Demographic category based on where respondent works
SERMC Staff	Code 1 if part of SERMC Staff, 0 otherwise
Balnochfield Army Community Hospital (BACH)	Code 1 if assigned to BACH, 0 otherwise
Eisenhower Army Medical Center (EAMC)	Code 1 if assigned to EAMC, 0 otherwise
Fox Army Community Hospital (FACH)	Code 1 if assigned to FACH, 0 otherwise
Lyster Army Community Hospital (LACH)	Code 1 if assigned to LACH, 0 otherwise
Martin Army Community Hospital (BMACH)	Code 1 if assigned to BMACH, 0 otherwise
Moncrief Army Community Hospital (MACH)	Code 1 if assigned to MACH, 0 otherwise
Winn Army Community Hospital (WACH)	Code 1 if assigned to WACH, 0 otherwise
<b>Rank</b>	Demographic category based on the respondent's rank
WG6-GS6	Code 1 if employee is a WG6 to GS6, 0 otherwise
GS7 - GS9	Code 1 if employee is a GS7 to GS9, 0 otherwise
GS10-GS11	Code 1 if employee is a GS10 or GS11, 0 otherwise
GS12 - GS15	Code 1 if employee is a GS12 to GS15, 0 otherwise
PVT - SPC	Code 1 if employee is a PVT to SPC, 0 otherwise
SGT - SSG	Code 1 if employee is a SGT or SSG, 0 otherwise
SFC - CSM	Code 1 if employee is a SFC to CSM, 0 otherwise
2LT - CPT	Code 1 if employee is a 2LT to CPT, 0 otherwise
CW3-MAJ	Code 1 if employee is a CW3 or MAJ, 0 otherwise
LTC - COL	Code 1 if employee is a LTC or COL, 0 otherwise
CON	Code 1 if employee is a contractor, 0 otherwise
<b>Duty Status</b>	Demographic category based on duty status
Active Duty	Code 1 if respondent is active duty military, 0 otherwise
DA Civilian	Code 1 if respondent is a D.A. Civilian, 0 otherwise
Contractor	Code 1 if respondent is a contractor, 0 otherwise
<b>Professional Discipline</b>	Demographic category based on professional discipline
Provider	Code 1 if a physician, PA, or NP, 0 otherwise
Nursing personnel	Code 1 if clinical other than provider, 0 otherwise
Administrative personnel	Code 1 if an administrative employee (includes clerks), 0 otherwise
<b>Organizational Level</b>	Demographic category based on the respondent's job
Executive Management	Code 1 if a CDR, DCA, DCN, DCCS, or CSM, 0 otherwise
ACofS / Department Head	Code 1 if an ACofS or Department Head, 0 otherwise
Clinic / Section Head	Code 1 if a Clinic or Section Head, 0 otherwise
Clinic / Section Employee	Code 1 if a Clinic or Section Employee, 0 otherwise
<b>Tenure</b>	The number of years a respondent has worked in their organization of assignment
<b>BSC Familiarity</b>	A self-reported score on a seven point scale where 1 = very unfamiliar and 7 = very familiar

## Methods and Procedures

### Survey Development and Distribution

The survey instrument was developed by deriving measurement

questions from the basic management question: Are BSC implementation efforts helping SERMC become a Strategy-Focused Organization (shown in Appendix C). Questions about the five principles of a SFO were based on a review of current literature about the BSC and its use in health care organizations. To encourage survey recipients to respond, the length of the survey was limited to 31 total questions divided into two sections. The first section contained six demographic questions. The second section contained 25 Likert scale questions that required respondents to indicate their agreement with the given statement on a seven-point scale (1 = strongly disagree and 7 = strongly agree). The 25 questions were grouped into five factors representing the five principles of a SFO. A cover letter was also developed to provide instructions for completing the survey and to emphasize the importance of the recipient's participation.

Prior to distribution, the completed survey, the cover letter, and the method for developing the measurement questions was pre-validated by a six-person panel of AMEDD and non-AMEDD subject matter experts. The panel consisted of AMEDD BSC team leaders/members from MAMC, SERMC, GPRMC, and GLWACH as well as a survey developer at Balanced Scorecard Collaborative. They were asked to complete the survey and then record how long it took them, critique the questions for readability and clarity, critique the instructions for completing the survey contained in the cover letter, and provide feedback on the format and appropriateness of the questions. Five of the six panel members provided very positive and constructive comments about the survey

instrument. Their comments were used to refine the instrument prior to distribution. One of the panel members misunderstood the intent of the study and felt the survey was not valid because it did not measure the utility of current AMEDD data systems. When the intent of the study was more thoroughly explained, this panel member chose not to participate further.

The surveys were distributed to each facility through the Deputy Commander for Administration (DCA). At the fall SERMC Commander's Conference, 6-8 November 2002, the leadership from each MTF was informed of the study and the DCA at each facility agreed to facilitate the distribution of the surveys. Each DCA received an email from the SERMC Deputy Chief of Staff prior to receiving the survey packets and then a letter containing distribution instructions (Appendix D) was sent to each DCA with the survey packets. Federal express packages containing the distribution instructions and survey packets were sent to each DCA during the first week of January 2003. The distribution instructions and the survey cover letter both asked that surveys be returned by 31 January.

Maximizing the survey response rate was a major concern during this study. Cooper and Schindler (2001) note in their research methods textbook that preliminary notifications, follow-up notifications, and return envelopes have all been shown to increase survey response rates. Additionally, Cooper and Schindler (2001) assert that the survey cover letter may be the most effective means to persuade a potential respondent to complete a survey and contrary to popular belief anonymity does

not affect survey response rates. Based on these guidelines for maximizing survey response rates, the DCA at each facility was used to distribute the surveys in the hope that they would locally provide preliminary and follow-up notifications to survey respondents. The SERMC Chief of Staff signed the cover letter and stressed the importance of gathering feedback on the Balanced Scorecard. Finally, since anonymity was shown not to affect response rates, the DCAs were given the option of centrally collecting the surveys or allowing the respondent to use the return envelope to send the survey directly to the researcher.

#### Sample

Survey packets consisting of the survey, a cover / instruction letter, and a return envelope were distributed to roughly 1500 persons within the region (200 to each MEDDAC and 300 to the MEDCEN/SERMC staff). The exact number of surveys distributed is unknown because some local reproduction of the survey instrument occurred. It is estimated that between 1550 and 1600 surveys were distributed of which 818 were returned for an estimated response rate of over 51 - 53%. Out of the 818 surveys returned, 69 were discounted (Table 3) due to missing data, not following instructions, or a general lack of effort to answer the questions (i.e. all answers were a "4"). The

Table 3 - Deleted Surveys

Reason for Deletion	Surveys Deleted
Missing Dependent Variable Scores	1
Failed to Answer Demographic Question(s)	41
Lack of Effort (All Dependent Answers were the Same)	27
Total Number of Surveys Deleted from Sample	69

remaining sample, N = 749 respondents, is representative of the general population of region employees. The demographic breakdown of the survey respondents is shown in Table 4.

As surveys were returned, the raw data from completed surveys was entered into a spreadsheet. Once the raw data set was complete, the demographic variables were recoded into mutually exclusive, categorically exhaustive, dichotomous variable sets. After recoding, the data set was entered into SPSS to facilitate statistical analysis.

#### Reliability and Validity of the Survey Instrument

The validity of the survey instrument was established in two ways. First, each question in the survey is based on lessons learned, proven success factors, or noted points of failure highlighted in peer-reviewed literature. This represents the content and construct validity of the survey instrument. Second the approval of the survey by the majority (5 out of 6) of the members of this panel indicates that in their judgment the instrument is valid.

Table 4 - Demographic Breakdown of Survey Responses with Average Years in Organization for each Demographic Group

Demographic Categories	Number of Responses	Percent of Total Responses	AVG Years in Org	Demographic Categories	Number of Responses	Percent of Total Responses	AVG Years in Org
<b>Organization</b>				<b>Organizational Level</b>			
SERMC Staff	26	3.47%	4.18	Executive Management	45	6.01%	3.16
Blanchfield	109	14.55%	6.08	ACofS / Department Head	153	20.43%	4.22
Eisenhower	138	18.42%	5.17	Clinic / Section Head	157	20.96%	5.31
Fox	104	13.89%	6.66	Clinic / Section Employee	394	52.60%	7.17
Lyster	94	12.55%	6.16	<b>Total</b>	<b>749</b>	<b>100.00%</b>	
Martin	87	11.62%	6.95	<b>Rank</b>			
Moncrief	69	9.21%	5.93	WG6-GS6	137	18.29%	7.75
Winn	122	16.29%	5.55	GS7 - GS9	84	11.21%	11.18
<b>Total</b>	<b>749</b>	<b>100.00%</b>		GS10-GS11	105	14.02%	10.70
<b>Duty Status</b>				GS12 - GS15	46	6.14%	9.72
Active Duty	351	46.86%	1.92	PVT - SPC	34	4.54%	1.40
DA Civilian	372	49.67%	9.58	SGT - SSG	48	6.41%	2.03
Contractor	26	3.47%	7.90	SFC - CSM	48	6.41%	1.73
<b>Total</b>	<b>749</b>	<b>100.00%</b>		2LT - CPT	71	9.48%	1.65
<b>Professional Discipline</b>				CW3-MAJ	72	9.61%	1.66
Provider	145	19.36%	3.75	LTC - COL	78	10.41%	2.67
Nursing	260	34.71%	5.75	CON	26	3.47%	7.90
Administrator	344	45.93%	7.00	<b>Total</b>	<b>749</b>	<b>100.00%</b>	
<b>Total</b>	<b>749</b>	<b>100.00%</b>					

Table 5 - SFO Principle Factor Reliability Scores

SFO Principle Factors	Cronbach's Alpha
Questions that comprise each factor	
<b>Principle Factor One - Mobilize change through executive leadership</b>	<b>.8948</b>
7a My MTF has a clearly stated vision	
7b My MTF has a clearly stated mission	
7c My MTF has clearly stated values	
8 Each member of the command group consistently presents the same vision, mission, strategy	
9 The command group has identified reasons why the MTF needs to change	
10 The command group has created a sense of urgency about changing the MTF	
<b>Principle Factor Two - Translate the strategy into operational terms</b>	<b>.8932</b>
11 The MTF strategy has been translated into strategic objectives that everyone understands	
12 These strategic objectives have been assembled into a strategy map and Balanced Scorecard that articulates the	
13 Measures/metrics have been developed to evaluate the organization's performance against these strategic	
14 The strategic objectives and their supporting measures cover financial and non-financial areas	
15 Everyone I know understands the strategy that is presented in the MTF Balanced Scorecard	
<b>Principle Factor Three - Align the organization to the strategy</b>	<b>.8824</b>
16 Each department/section has developed objectives that support the MTF's strategy	
17 Processes / Initiatives that do not support the MTF's strategy have been stopped / eliminated	
18 Providers, nursing personnel, and administrators work as a team to achieve strategic objectives	
19 Most employees understand how their department/section objectives are linked to the MTF's strategic objectives	
20 Resources are allocated to initiatives that support the MTF's strategic objectives	
<b>Principle Factor Four - Make strategy everyone's job</b>	<b>.8378</b>
21 My actions directly impact the future of the organization and contribute to its success	
22 My job description reflects the strategic objectives of the organization	
23 Performance evaluations and annual awards are based on an employee's contributions to department/clinic	
24 I am encouraged to develop initiatives that support the objectives of my department/section/clinic	
25 I discuss the strategic objectives of the organization with my co-workers on a regular basis	
<b>Principle Factor Five - Make strategy a continual process</b>	<b>.8808</b>
26 Feedback from employees is considered when strategic objectives are established or changed	
27 Strategic objectives and Balanced Scorecard measures are discussed in staff and committee meetings regularly	
28 My department/section makes budget decisions based on the strategic objectives that we have established	
29 Employees in my organization are encouraged to share "best practices"	
30 Decisions in my organization are based on facts / measured outcomes rather than people's opinions	

Computing the Cronbach's alpha to test the average inter-correlation between the factor questions assessed the reliability of the five SFO principle factors. Generally, a reliability coefficient of .80 or higher is considered as an acceptable level of reliability (UCLA Academic Technology Services, 1998). Each of the values computed for the five SFO principle factors (Table 5) exceeds .80 and thus provides a sufficient measure of reliability.

#### Statistical Methods

First, the dependent variable question scores within each SFO principle factor were averaged for each respondent. The mean and standard deviation for each principle was computed to provide an overall score for each SFO principle factor. These scores represent SERMC's degree of achievement of each principle relative to the other principles. The student's t test was used to identify significant differences between the SFO principle factor scores. Second, a one-way analysis of variance (ANOVA) was used to assess the differences among the various demographic groups (e.g. providers, nursing personnel, and administrative personnel) within each demographic category (e.g. professional discipline) upon the dependent SFO principle factor scores. When the ANOVA identified a significant difference among demographic groups, a post hoc multiple means comparison test was used to determine which groups differed significantly. The Games-Howell post hoc test procedures were used because the various demographic groups were unequal in size and exhibited heterogeneity of variance (Games & Howell, 1976). To facilitate

targeted modification of BSC implementation practices, the same analysis was performed on each individual survey question. Finally, regression analysis was conducted to assess the effects of tenure (years in an organization) and BSC familiarity (self-reported score) on the SFO principle factor scores.

### Results

Descriptive statistics are contained in Appendix E. The number of survey responses and the means and standard deviations are reported for each SFO principle factor by demographic category in Table E1. The demographic group of "volunteer" found in the demographic category "duty status" was deleted from the study because no responses were received from volunteer employees. More extensive demographic breakdowns (found in Table E2) show that some of the respondents who indicated that they are executive level management also indicated that they have low military or civilian ranks. This is an indication that they identified their organizational level based on where they work rather than what job they hold. This will be addressed later in the comments section.

The distribution of survey responses for the individual survey questions grouped into their SFO principle factors is shown in Table E3 and the composite SFO principle factor scores are shown in Table E4. Overall results indicate that the region as a whole has achieved SFO principle one ( $M = 5.50$ ), mobilize change through executive leadership, more than any other principle. Of the four remaining principles, principle four, make strategy everyone's job, received a higher composite score

( $M = 4.96$ ) than principles two, three, and five ( $M = 4.51, 4.40$ , and  $4.54$  respectively).

Student's  $t$  tests were calculated between each pair of SFO principle factors to determine if these differences in their mean scores proved to be statistically significant. The differences between all of the SFO principle factors except for principles two and five were found to be statistically significant ( $p < .05$ ) and most were significant at the  $p < .001$  level (Table 6). These results mean that a ranking of SFO

Table 6 - Results of Student's  $t$  Test Comparing SFO Principle Factor Means

SFO Principles Compared		Mean Difference	$t^*$	Sig.
Principle One	Principle Two	0.99	24.04	0.00
	Principle Three	1.10	26.71	0.00
	Principle Four	0.54	13.20	0.00
	Principle Five	0.96	23.34	0.00
Principle Two	Principle Three	0.11	2.47	0.01
	Principle Four	(0.44)	9.98	0.00
	Principle Five	(0.03)	0.64	0.52
Principle Three	Principle Four	(0.55)	12.88	0.00
	Principle Five	(0.14)	3.21	0.00
Principle Four	Principle Five	0.42	9.28	0.00

\*  $df = 748$

principle factors by mean score is representative of the region's degree of success with each principle. The two lowest ranking principles, principle two and principle five, are the only exceptions, there is no significant difference between

these two.

### Results of the Demographic Groups

This study contained five categories of demographic independent variables with each category containing from three to eleven demographic groups. A one-way ANOVA and Games-Howell post hoc tests were used to determine whether statistically significant differences existed among the demographic group SFO principle factor mean scores within each demographic category. Significant differences between demographic groups were found in each demographic category supporting the proposed hypothesis that group membership within the selected demographic categories effects an employee's perception of the organization's strategic focus. The results for each demographic category will be reported separately.

#### Demographic Category 1 - Organization of Assignment

The demographic category of Organization of Assignment divided respondents into the eight organizations previously shown in Table 2. Significant differences ( $p < .05$ ) between organization of assignment group means were found in all five SFO principle factors.  $F$  values ( $df = 7, 741$ ) for the differences among groups ranged from 4.76 for SFO principle four to 19.46 for SFO principle two (see Table 7). The Games-Howell multiple comparison procedures showed that MACH had mean SFO principle factor scores that were significantly higher than almost all other organizations. BACH and EAMC had mean factor scores that proved to be significantly lower than other organizations. Table 8 shows all of the significant differences

Table 7 - Analysis of Variance and F Ratios for the Demographic Category Organization of Assignment

<i>Source</i>		<i>Sum of Squares</i>	<i>Mean Square</i>	<i>F</i>
Principle One Average Score	Between Groups	86.67	12.38	10.70**
	Within Groups	857.55	1.16	
	Total	944.22		
Principle Two Average Score	Between Groups	172.87	24.70	19.46**
	Within Groups	940.36	1.27	
	Total	1113.22		
Principle Three Average Score	Between Groups	61.30	8.76	6.64**
	Within Groups	977.58	1.32	
	Total	1038.88		
Principle Four Average Score	Between Groups	48.49	6.93	4.76**
	Within Groups	1077.90	1.45	
	Total	1126.39		
Principle Five Average Score	Between Groups	65.76	9.39	5.94**
	Within Groups	1172.40	1.58	
	Total	1238.16		

*df* = 7, 741\* *p* < .05\*\* *p* < .001

between the organization of assignment groups within each SFO principle factor. Because significant differences existed in all five SFO principle factors, all of the individual survey questions were analyzed. Significant differences were found in every question between at least two of the organizations. Appendix F contains the results for the complete analysis of each survey question by organization of assignment.

Table 8 - Significant Mean Differences in Organization of Assignment Group Mean Response Scores

Dependent Variable	Organization 1	Organization 2	Mean Difference (1-2)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Principle One Mean Score	MACH	EAMC	1.06	0.16	0.00	-1.41	-0.72
	MACH	BACH	1.31	0.17	0.00	-1.79	-0.83
	MACH	LACH	0.92	0.17	0.00	-1.32	-0.53
	MACH	FACH	0.90	0.17	0.00	-1.30	-0.50
	MACH	WACH	0.74	0.16	0.00	0.36	1.12
	MACH	SERMC Staff	1.20	0.25	0.00	-1.90	-0.50
	MACH	BMACH	0.68	0.17	0.00	-1.12	-0.23
	BMACH	BACH	0.63	0.15	0.02	-1.19	-0.07
	WACH	BACH	0.57	0.14	0.02	-1.08	-0.05
Principle Two Mean Score	MACH	BACH	1.70	0.17	0.00	-2.20	-1.20
	MACH	LACH	1.29	0.18	0.00	-1.73	-0.84
	MACH	EAMC	1.58	0.17	0.00	-2.02	-1.15
	MACH	BMACH	1.16	0.18	0.00	-1.68	-0.64
	MACH	FACH	1.33	0.17	0.00	-1.80	-0.86
	WACH	EAMC	0.82	0.14	0.00	-1.25	-0.39
	WACH	BACH	0.94	0.15	0.00	-1.43	-0.44
	MACH	WACH	0.76	0.17	0.00	0.31	1.21
	MACH	SERMC Staff	1.19	0.26	0.00	-1.88	-0.50
	WACH	FACH	0.57	0.15	0.01	-1.03	-0.10
	WACH	LACH	0.52	0.15	0.01	-0.97	-0.08
Principle Three Mean Score	MACH	EAMC	0.96	0.17	0.00	-1.46	-0.46
	MACH	BACH	1.05	0.18	0.00	-1.60	-0.50
	MACH	BMACH	0.74	0.19	0.00	-1.28	-0.19
	MACH	LACH	0.64	0.18	0.00	-1.12	-0.15
	MACH	FACH	0.65	0.18	0.00	-1.17	-0.13
	MACH	SERMC Staff	0.88	0.26	0.01	-1.61	-0.15
	MACH	WACH	0.55	0.17	0.03	0.03	1.06
Principle Four Mean Score	MACH	BACH	0.98	0.19	0.00	-1.60	-0.36
	MACH	FACH	0.72	0.19	0.01	-1.31	-0.13
	EAMC	BACH	0.53	0.15	0.03	-1.03	-0.02
	LACH	BACH	0.55	0.17	0.04	-1.08	-0.02
	WACH	BACH	0.54	0.16	0.05	-1.08	0.00
Principle Five Mean Score	MACH	BACH	1.07	0.19	0.00	-1.68	-0.46
	MACH	FACH	0.87	0.20	0.00	-1.48	-0.25
	WACH	BACH	0.74	0.17	0.00	-1.27	-0.20
	MACH	EAMC	0.69	0.19	0.01	-1.25	-0.12
	MACH	LACH	0.65	0.20	0.02	-1.23	-0.08
	MACH	BMACH	0.64	0.20	0.04	-1.27	-0.02

### Demographic Category 2 - Rank

Eleven rank groups consisting of similar military or

civilian ranks were formed based on the self-reported ranks of the 749 survey respondents (Table E5). A one-way ANOVA revealed that significant differences ( $p < .05$ ) exist among the rank groups for SFO principle factors one, two, four, and five (Table 10). Of these, the differences among rank groups for factors

Table 9 - Analysis of Variance and F Ratios for the Demographic Category Rank

<i>Source</i>		<i>Sum of Squares</i>	<i>Mean Square</i>	<i>F</i>
Principle One Average Score	Between Groups	41.74	4.17	3.41**
	Within Groups	902.48	1.22	
	Total	944.22		
Principle Two Average Score	Between Groups	31.06	3.11	2.12*
	Within Groups	1082.17	1.47	
	Total	1113.22		
Principle Three Average Score	Between Groups	14.48	1.45	1.04
	Within Groups	1024.40	1.39	
	Total	1038.88		
Principle Four Average Score	Between Groups	61.69	6.17	4.28**
	Within Groups	1064.70	1.44	
	Total	1126.39		
Principle Five Average Score	Between Groups	67.49	6.75	4.25**
	Within Groups	1170.67	1.59	
	Total	1238.16		

$df = 10, 738$

\*  $p < .05$

\*\*  $p < .001$

one, four and five were significant at the  $p < .001$  level. Controlling the familywise error rate by using the Games-Howell multiple comparison procedure revealed that significant differences existed between rank groups within factors one, four, and five (Table 10). For these three factors, the WG6 -

Table 10 - Significant Mean Differences in Rank Group Mean Response Scores

Dependent Variable	Rank Group 1	Rank Group 2	Mean Difference (1-2)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Principle One Mean Score	LTC - COL	WG6 - GS6	0.57	0.16	0.01	-1.05	-0.09
	GS10 - GS11	WG6 - GS6	0.50	0.14	0.03	-0.99	-0.02
Principle Four Mean Score	LTC - COL	WG6 - GS6	0.81	0.17	0.00	-1.37	-0.24
	SFC - CSM	WG6 - GS6	0.85	0.20	0.00	-1.51	-0.20
	2LT - CPT	WG6 - GS6	0.67	0.18	0.01	-1.24	-0.10
	CW3 - MAJ	WG6 - GS6	0.60	0.17	0.02	-1.15	-0.05
Principle Five Mean Score	SFC - CSM	WG6 - GS6	0.92	0.21	0.00	-1.58	-0.26
	LTC - COL	WG6 - GS6	0.80	0.18	0.00	-1.42	-0.19
	2LT - CPT	WG6 - GS6	0.71	0.18	0.01	-1.31	-0.12
	CW3 - MAJ	WG6 - GS6	0.65	0.18	0.01	-1.21	-0.10
	GS12 - GS15	WG6 - GS6	0.82	0.21	0.02	-1.56	-0.08

GS6 rank group mean response score was significantly lower than other rank groups. The LTC - COL and GS10 - GS11 rank group mean response scores were significantly higher than the WG6 - GS6 group score for SFO principle factor one. All of the commissioned officer rank group (LTC - COL, CW3 - MAJ, 2LT - CPT) mean response scores were significantly higher than the WG6 - GS6 group response mean for factors four and five. The complete analysis of SFO principle factors and individual questions based on the demographic category of rank is included at Appendix G.

#### Demographic Category 3 - Duty Status

The demographic category of duty status was designed to determine if significant differences in strategic focus exist between active duty military, DA civilian, and contract employees. Table 11 displays the results of the one-way ANOVA

Table 11 - Analysis of Variance and F Ratios for the Demographic Category Duty Status

<i>Source</i>		<i>Sum of Squares</i>	<i>Mean Square</i>	<i>F</i>
Principle One Mean Score	Between Groups	10.19	5.09	4.07*
	Within Groups	934.03	1.25	
	Total	944.22		
Principle Two Mean Score	Between Groups	8.96	4.48	3.03*
	Within Groups	1104.26	1.48	
	Total	1113.22		
Principle Three Mean Score	Between Groups	0.19	0.10	0.07
	Within Groups	1038.68	1.39	
	Total	1038.88		
Principle Four Mean Score	Between Groups	26.97	13.48	9.15**
	Within Groups	1099.42	1.47	
	Total	1126.39		
Principle Five Mean Score	Between Groups	27.63	13.82	8.51**
	Within Groups	1210.53	1.62	
	Total	1238.16		

*df* = 2, 746\* *p* < .05\*\* *p* < .001

which found significant differences ( $p < .05$ ) among the three groups of employees in SFO principle factor one, two, four, and five. However, only the differences among group mean scores in SFO principles four and five were significant at the  $p < .001$  level. The subsequent Games-Howell test identified (results shown in Table 12) significant differences between active duty military and DA civilian employee mean scores in principle factors four and five. The mean response score for active duty military employees was significantly higher (mean difference = .38 for each factor) than that of the DA civilian employees. Significant differences also existed between active duty military and contract employees on several of the individual questions, but the aggregate SFO principle factor means did not

significantly differ. However, targeted BSC implementation improvements may be designed based on the significant differences in individual question mean response scores (shown in Appendix H).

Table 12 - Significant Mean Differences in Duty Status Group Mean Response Scores

Dependent Variable	Duty Status Group 1	Duty Status Group 2	Mean Difference (1-2)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Principle Four Mean Score	Active Duty Military	DA Civilians	0.38	0.09	0.00	0.17	0.59
Principle Five Mean Score	Active Duty Military	DA Civilians	0.38	0.09	0.00	0.16	0.60

#### Demographic Category 4 - Professional Discipline

The analysis of this demographic category tested the theory that traditional divisions along the roles of physicians, nurses, and administrators effected the employees' perception of strategic focus. The group choices on the survey included medical doctors, physician assistants, and nurse practitioners in the provider category. All other clinical personnel were lumped into the nursing personnel group and all administrative personnel were lumped into the administrative personnel group. Significant differences among groups were found (Table 13) in SFO principle factors two and five ( $F(2,746) = 6.23$ ,  $p < .01$  and  $F(2,746) = 4.31$ ,  $p < .05$  respectively). Using the Games-Howell test procedures showed that administrative personnel mean response scores were significantly higher than nursing personnel mean response scores in factors two and five (Table 14). The results of individual questions analysis based on professional discipline groups is shown at Appendix I.

Table 13 - Analysis of Variance and F Ratios for the Demographic Category Professional Discipline

Source		Sum of Squares	Mean Square	F
Principle One Mean Score	Between Groups	5.26	2.63	2.09
	Within Groups	938.96	1.26	
	Total	944.22		
Principle Two Mean Score	Between Groups	18.29	9.15	6.23*
	Within Groups	1094.93	1.47	
	Total	1113.22		
Principle Three Mean Score	Between Groups	0.52	0.26	0.19
	Within Groups	1038.36	1.39	
	Total	1038.88		
Principle Four Mean Score	Between Groups	5.54	2.77	1.84
	Within Groups	1120.85	1.50	
	Total	1126.39		
Principle Five Mean Score	Between Groups	14.14	7.07	4.31*
	Within Groups	1224.02	1.64	
	Total	1238.16		

$df = 2, 746$

\*  $p < .05$

\*\*  $p < .001$

Table 14 - Significant Mean Differences in Professional Discipline Group Mean Response Scores

Dependent Variable	Professional Discipline Group 1	Professional Discipline Group 2	Mean Difference (1-2)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Principle Two Mean Score	Administrative Personnel	Nursing Personnel	0.35	0.10	0.00	-0.58	-0.12
Principle Five Mean Score	Administrative Personnel	Nursing Personnel	0.30	0.11	0.01	-0.55	-0.05

### Demographic Category 5 - Organizational Level

The organizational level demographic category consisted of four groups based on the position that an employee holds. The group mean scores within this category were found to be significantly different in all five SFO principle factors.

Values for  $F(3,745)$  ranged from 4.67 for factor three ( $p < .01$ ) to 28.12 for factor four ( $p < .001$ ). Complete results for the one-way ANOVA are shown in Table 15. Applying the Games-Howell

Table 15 - Analysis of Variance and F Ratios for the Demographic Category Organizational Level

<i>Source</i>		<i>Sum of Squares</i>	<i>Mean Square</i>	<i>F</i>
Principle One Mean Score	Between Groups	72.80	24.27	20.75**
	Within Groups	871.42	1.17	
	Total	944.22		
Principle Two Mean Score	Between Groups	71.44	23.81	17.03**
	Within Groups	1041.79	1.40	
	Total	1113.22		
Principle Three Mean Score	Between Groups	19.18	6.39	4.67*
	Within Groups	1019.70	1.37	
	Total	1038.88		
Principle Four Mean Score	Between Groups	114.58	38.19	28.12**
	Within Groups	1011.81	1.36	
	Total	1126.39		
Principle Five Mean Score	Between Groups	109.70	36.57	24.14**
	Within Groups	1128.46	1.51	
	Total	1238.16		

$df = 3, 745$

\*  $p < .05$

\*\*  $p < .001$

multiple comparison procedures revealed significant mean differences between almost every group in every factor. Table 16 shows all of the significant different mean differences for each principle factor. The group of clinic/section employees had the lowest mean response score in each factor and those mean scores were always significantly different from the executive management group and the Assistant Chief of Staff/Department Head group. This indicates that the strategic focus of the

employees at the top of the organization is much greater than that of the employees at the bottom of the organization.

Further analysis of this demographic category is contained in Appendix J.

Table 16 - Significant Mean Differences in Organizational Level Group Mean Response Scores

Dependent Variable	Org Level 1	Org Level 2	Mean Difference (1-2)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Principle One Mean Score	ACofS/Dept Head	Clinic / Section Employee	0.59	0.10	0.00	0.34	0.83
	Executive Management	Clinic / Section Employee	0.96	0.17	0.00	0.63	1.29
	Clinic / Section Head	Clinic / Section Employee	0.49	0.10	0.00	0.23	0.75
	Executive Management	Clinic / Section Head	0.47	0.18	0.00	0.12	0.82
	Executive Management	ACofS/Dept Head	0.37	0.18	0.03	0.03	0.72
Principle Two Mean Score	Executive Management	Clinic / Section Employee	1.08	0.19	0.00	0.65	1.52
	ACofS/Dept Head	Clinic / Section Employee	0.54	0.11	0.00	0.26	0.83
	Executive Management	Clinic / Section Head	0.71	0.20	0.00	0.24	1.18
	Clinic / Section Head	Clinic / Section Employee	0.37	0.11	0.01	0.08	0.66
	Executive Management	ACofS/Dept Head	0.54	0.20	0.02	0.07	1.00
Principle Three Mean Score	Executive Management	Clinic / Section Employee	0.58	0.18	0.01	0.14	1.02
	Executive Management	Clinic / Section Head	0.53	0.20	0.03	0.05	1.02
Principle Four Mean Score	ACofS/Dept Head	Clinic / Section Employee	0.81	0.11	0.00	0.55	1.08
	Executive Management	Clinic / Section Employee	1.12	0.18	0.00	0.72	1.53
	Clinic / Section Head	Clinic / Section Employee	0.55	0.11	0.00	0.27	0.83
	Executive Management	Clinic / Section Head	0.57	0.20	0.00	0.14	1.01
Principle Five Mean Score	ACofS/Dept Head	Clinic / Section Employee	0.76	0.12	0.00	0.47	1.05
	Executive Management	Clinic / Section Employee	1.22	0.19	0.00	0.80	1.64
	Executive Management	Clinic / Section Head	0.75	0.21	0.00	0.28	1.21
	Clinic / Section Head	Clinic / Section Employee	0.47	0.12	0.00	0.17	0.78
	Executive Management	ACofS/Dept Head	0.46	0.21	0.04	0.01	0.91

Analysis of Tenure and BSC Familiarity

Regression analysis was used to determine if the self-reported variables of tenure and BSC familiarity had a significant relationship to any or all of the SFO principle factor mean response scores. A significant relationship was found to exist ( $p < .05$ ) between tenure and SFO principle factors four and five. The negative coefficients for the variable of tenure in the regression line equations indicates that the SFO principle four or five aggregate score will be lower for employees who have worked in the same organization for a long period of time. The results of tenure regressed upon the five SFO principle factor scores is shown in Table 17.

Table 17 - Regression of Tenure Upon SFO Principle Factor Mean Response Scores

Dependent Variable	<i>R</i>	<i>R</i> <sup>2</sup>	<i>SEE</i>	<i>F</i>
Principle One Mean Score	0.0044	0.0000	1.12	0.01
Principle Two Mean Score	0.0417	0.0017	1.22	1.29
Principle Three Mean Score	0.0422	0.0018	1.18	1.33
Principle Four Mean Score	0.0839	0.0070	1.22	5.29*
Principle Five Mean Score	0.1096	0.0120	1.28	9.09*

*df* = 1, 747

\*  $p < .05$

BSC familiarity was found to have a significant relationship to all five of the SFO principle factor mean scores (Table 18). All five relationships were positive in nature, indicating that as an employee's knowledge of the BSC increased so did their strategic focus.

Table 18 - Regression of BSC Familiarity Upon SFO Principle Factor Mean Response Scores

Dependent Variable	<i>R</i>	<i>R</i> <sup>2</sup>	<i>SEE</i>	<i>F</i>
Principle One Mean Score	0.36	0.13	1.05	108.96**
Principle Two Mean Score	0.50	0.25	1.06	251.59**
Principle Three Mean Score	0.31	0.10	1.12	80.30**
Principle Four Mean Score	0.38	0.14	1.14	124.88**
Principle Five Mean Score	0.44	0.20	1.15	182.11**

*df* = 1, 747

\*\* *p* < .001

### Discussion and Recommendations

The purpose of this study was to determine if SFO principle factor mean response scores (representing a respondent's perception of the organization's strategic focus) differed significantly based on group membership within five distinct demographic categories. If significant differences were found, this information would be used to make recommendations to the regional command on improving their implementation of the BSC. The results from this study suggest that the demographic groups

of WG6 - GS6 employees, DA civilian employees, nursing personnel, and clinic/section employees have much less strategic focus than their counterparts in their respective demographic categories. Further, there are significant differences between the various facilities within the region and between employees with markedly different tenures in their organization.

Looking at the region as a whole, the  $t$  tests performed between the five SFO principle factor mean response scores indicates that SERMC has achieved SFO principle one to a greater degree than any of the other principles. Considering that the SERMC is still implementing the BSC, this is what was expected. Brown (2002) explains in his article that the five SFO principles are not sequential steps. While the first principle, Mobilizing Change through Leadership must happen first, the other four SFO principles occur simultaneously with constant leadership emphasis. The results of this study support the assertion that SERMC has accomplished SFO principle one first and is now working on the other four SFO principles. The only recommendation based on these findings is to examine the specific questions within each principle - paying particular attention to the questions contained in SFO principle factors two, three, and five. The mean response scores for principle factors two, three, and five were significantly lower than those of factors one and four, and it is no surprise that they contained the questions with the lowest mean response scores (Table E3).

Question 15 had the lowest mean response score of any of

the questions. This question measured agreement with the statement that everyone understands the strategy presented by the BSC. A close second to question 15 is question 31 - the question that measured a respondent's familiarity with the BSC. The fact that these two questions received the lowest overall mean response scores indicates that the organization's BSC has not been explained to all people within the organization very well. These scores may also indicate that the BSC is not being used throughout the organization. The other questions with significantly low mean response scores are questions 16, 17, 19, and 27. Collectively these questions indicate that departments and sections are not developing supporting scorecards and that existing strategic objectives and measures are not discussed regularly in staff and committee meetings. Implementation recommendations based on the mean response scores for these questions would include developing initiatives to "cascade" the region and MTF scorecards down into sections and clinics, forcing subordinate managers and employees to "crosswalk" their objectives to the organization's scorecard, and restructuring existing staff and committee meetings so BSC objectives and measures are reviewed and updated. The regional BSC implementation plan should specifically address what actions and initiatives target each SFO principle.

The demographic groups of WG6 - GS6, DA civilians, nursing personnel, and clinic/section employees should be similarly targeted with specific actions and initiatives to increase their use and understanding of the BSC. The significant positive

relationship between BSC familiarity and strategic focus indicates that exposure to and education about the BSC can affect these employees strategic focus in a positive manner. The identification of employees that are of low rank (i.e. the WG6 - GS6 employees) and those who work at the lowest subordinate level (clinic/section employees) as not being as strategically focused as other employee groups suggests that communication of the organization's BSC does not reach the "bottom" of the organization. Inferential tests show that differences based on organizational level are more significant than those based on rank. The fact that some people (like executive secretaries, drivers, and special staff) who identified themselves as executive management were of low military or civilian rank (see demographic breakdowns at Table E2) indicates that where you work is much more important than what rank you hold. Employees at the top of the organization (represented by the highest rank groups and the executive management group) and those that work with and around them are much more familiar with the BSC than any other employees. Their mean response scores in each of the SFO principle factors are subsequently higher than all other employee groups. Why the mean response scores of nursing personnel and DA civilian employees are lower than other groups is not as clear. A close look at the analysis of the individual questions within each factor may provide more information with which to adjust BSC implementation.

The results from comparing professional discipline group

means show that nursing personnel do not feel that objectives and measures have been developed that adequately express the organization's strategy nor measure overall performance. They also feel that leadership has not presented a compelling case for changing the organization. Finally, their responses to questions 26 and 27 indicate their feelings that employee feedback is not considered during strategic planning and that their organization's strategy is not discussed during recurring meetings. The nursing personnel group also had the lowest mean response score for BSC familiarity. It appears that this last fact has a great deal to do with the other low mean response scores (and a quick regression analysis substantiates this assertion). Future BSC implementation efforts should include actions to increase the knowledge and exposure of nursing personnel to the BSC. Further, they should be routinely be included in establishing objectives and measures for the department, section, or clinic in which they work.

The DA civilian group mean response scores indicate that they do not understand the strategy articulated by their organization's BSC and they do not feel that they are included in the strategic planning process. Their scores also indicate their perceptions that evaluations and awards are not based on contributions toward strategic objectives and budget decisions do not support the strategic objectives on the BSC. Similar to the nursing personnel group, the DA civilian group mean response score on question 9 indicates that the command has not identified why the organization needs to change. Within the

demographic category of duty status, both the DA civilian group and the contractor group mean response scores for BSC familiarity were significantly lower than the active duty military mean response score. Further, the contractor group had low mean response scores in many of the same questions that the DA civilian group did. However, the relatively small size of the contractor group ( $n = 26$ ) compared with the other two duty status groups ( $n = 351$  for active duty,  $n = 372$  for DA civilian) does not allow us to conclude that the substantial mean differences between contract employees and active duty military employees are significant. Changes to BSC implementation can be made to include DA civilians in the strategic planning process, to restructure DA civilian employee evaluations and awards to reflect the strategic objectives of the MTF, and to review financial decisions to determine if they support the objectives articulated by the BSC. Finally, efforts to identify why change is necessary should be directed at DA civilian employees and it would not hurt to include contract employees in these efforts.

Interpretation of the results of the demographic category organization of assignment is difficult. Although significant differences were found between the organization group mean response scores, several intervening variables confound any effort to attribute those differences solely to variations in BSC implementation. Each organization is in a different geographic location, operates in conjunction with a different installation leadership team and support structure, serves a unique group of beneficiaries, offers varying levels of medical

care, and there are many more. Because of all the differences from one organization to the next the only recommendation for improving BSC implementation based on analysis of this category is that organizations with lower overall scores should examine the organizations with higher overall scores to identify BSC implementation best practices which could be emulated. A separate analysis of the responses from each individual facility would be the best way to tailor BSC implementation at a specific location. That analysis will be performed on the data set from this study in the near future.

#### Conclusion

The results of this study provide regional and MTF leaders with quantitative data to support BSC implementation actions and initiatives. The significant differences found between the groups in multiple demographic categories allow leaders to tailor these actions and initiatives to groups that are unfamiliar or underserved by current BSC efforts or practices. Refined BSC implementation efforts and practices should raise the overall strategic focus of all employees and improve the organization's ability to accomplish their stated strategy resulting in better health services for the SERMC's beneficiaries. However, this study simply establishes a baseline for strategic focus within the SERMC. A similar study should be conducted a year or two into the future to assess the benefits of using a BSC strategic management system.

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## Appendix A - MEDCOM BSC Implementation Plan

06/19/01 TUE 12:16 FAX 7036818632

OTSG MANPOWER

→→→ MEDCOM PAE

002

REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
HEADQUARTERS, UNITED STATES ARMY MEDICAL COMMAND  
2050 WORTH ROAD  
FORT SAM HOUSTON, TEXAS 78234-6000

MCCG-PAE

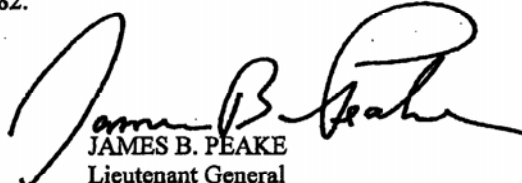
29 MAY 2001

## MEMORANDUM FOR COMMANDERS, MAJOR SUBORDINATE COMMANDS

SUBJECT: U.S. Army Medical Command Implementation Plan for the Balanced Scorecard

1. The purpose of this correspondence is to provide guidance on the implementation of the Balanced Scorecard (BSC) throughout the U.S. Army Medical Command (MEDCOM). On 16 April 2001, I approved the Army Medical Department (AMEDD) BSC (enclosure 1) and the alignment of the BSCs for the Great Plains Regional Medical Command (GPRMC) (enclosure 2) and of the Fort Leonard Wood Army Community Hospital (FLWACH) (enclosure 3) with the AMEDD BSC. The GPRMC and the FLWACH BSCs are the pilot RMC and medical treatment facility (MTF) BSCs, respectively for your RMCs and MTFs to refer to when constructing their individual BSCs. The AMEDD Center and School is developing the pilot BSC for the other MSCs. As soon as it is aligned with the AMEDD BSC, it will be distributed.
2. I intend to use the AMEDD BSC to focus and communicate my strategy. Your organization's BSC should be in vertical alignment with the AMEDD BSC to insure that processes are in place to achieve the AMEDD's strategic objectives. To meet my goal of using the BSC to allocate resources for new initiatives in FY02, completed and aligned MSC BSCs along with business case analyses (rationalized initiatives) should be forwarded to PA&E by 31 August 2001.
3. I have appointed the Director, Program Analysis and Evaluation (PA&E) as the responsible staff officer for implementing the BSC. You should appoint a Work Group Project Team Leader and notify the PA&E BSC Project Leader of the appointment and subsequent changes. The Work Group Team Leader should be a senior officer or civilian with at least one year left in the organization. The PA&E staff is available to assist you in preparing, cascading, and aligning the BSCs throughout your organization.
4. The implementation of the BSC throughout the MEDCOM will add value to the support that we provide to our customers. It is a tool to verify that we are making progress toward our strategic objectives. I appreciate the support that you provide every day and look forward to your continued assistance as we focus on improvements that will carry us into the 21<sup>st</sup> century.
5. Points of contact are the BSC Project Leader, Ms. Jo Anne Cyr, DSN 471-7269, and the BSC Project Manager, Mr. Herb Coley, DSN 471-8382.

3 Encls  
as

  
JAMES B. PEAKE  
Lieutenant General  
Commanding

## Appendix B - Survey Instrument

The next three pages contain the survey instrument used for this study. The first page is the cover letter and the subsequent two pages are the survey.

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## Strategic Focus Assessment

To: Selected Employees of Army Medical Treatment Facilities (MTF)

From: Chief of Staff, Southeast Regional Medical Command

Reference: Strategic Focus Survey

The Southeast Regional Medical Command (SERMC) is working hard to improve the health care we provide to active duty soldiers, retirees, and dependents. The strategic focus and sense of purpose of MTF staff members is a major component of our efforts to improve that health care. The Balanced Scorecard (BSC) is the strategic management system adopted by the Army Medical Department to assist all regional and facility leaders in strategic planning and management. The SERMC has been using the BSC for roughly a year, and the time has come to assess our efforts to provide a strategic focus to our daily business. To that end, I need your help in completing the attached survey.

The survey has 31 questions and will take less than 10 minutes to complete. Please answer the questions to the best of your ability, fold and staple the survey so the address label shows, and send through official mail. All surveys are anonymous and your input will be combined with other responses to refine strategic planning and management efforts within SERMC.

If you have additional comments or questions you can contact the officer responsible, MAJ Mark Swofford, at (706) 787-7645 or [Mark.Swofford@se.amedd.army.mil](mailto:Mark.Swofford@se.amedd.army.mil).

Thank you for your participation.

JIMMY SANDERS  
COL, MS  
Chief of Staff

\*\*\*\*\* PLEASE RETURN COMPLETED SURVEYS BY 31 JANUARY \*\*\*\*\*

## Strategic Focus Assessment Survey

1 What organization are you assigned to? (place an X next to your organization)

- ☐ SERMC Regional Staff  
☐ Blanchfield Army Community Hospital  
☐ Eisenhower Army Medical Center  
☐ Fox Army Health Center  
☐ Lyster Army Community Hospital / USAAC  
☐ Martin Army Community Hospital  
☐ Moncrief Army Community Hospital  
☐ Winn Army Community Hospital



# Southeast Regional Medical Command

Leading The Way

2 How many years have you worked in the organization? \_\_\_\_\_

3 What is your rank or grade? (Contractors put Con) \_\_\_\_\_

4 Employment Status (place an X next to the one that best describes you)

- ☐ Active Duty Military  
☐ Government Civilian  
☐ Contract Employee (to include resource sharing personnel)  
☐ Volunteer



5 Organizational Department (place an X next to the one that best describes you)

- ☐ Clinician or Provider (MD, DO, NP, PA, etc...)  
☐ Nursing Personnel or Support Staff (RN, LPN, LVN, NA, Technician)  
☐ Administrative or Staff Positions (to include clerks)

6 Organizational Level (place an X next to the one that best applies to you)

- ☐ Executive Management (CDR, Chief of Staff, DCCS, DCA, DCN, CSM)  
☐ AcofS, Department Chief/OIC/Head Nurse/NCOIC/or HCA  
☐ Clinic/Section OIC/Head Nurse/NCOIC/or HCA  
☐ Clinic or Section employee

**Express your agreement or disagreement with the following statements by circling a number on the scale provided**

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
7 My MTF has a clearly stated:							
Vision	1	2	3	4	5	6	7
Mission	1	2	3	4	5	6	7
Strategy	1	2	3	4	5	6	7
8 Each member of the command group consistently presents the same vision, mission, strategy	1	2	3	4	5	6	7
9 The command group has identified reasons why the MTF needs to change	1	2	3	4	5	6	7
10 The command group has created a sense of urgency about changing the MTF	1	2	3	4	5	6	7
11 The MTF strategy has been translated into strategic objectives that everyone understands	1	2	3	4	5	6	7
12 These strategic objectives have been assembled into a strategy map and Balanced Scorecard that articulates the MTF's strategy	1	2	3	4	5	6	7

# SERMC SFO Assessment

65

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
13 Measures/metrics have been developed to evaluate the organization's performance against these strategic objectives	1	2	3	4	5	6	7
14 The strategic objectives and their supporting measures cover financial and non-financial areas	1	2	3	4	5	6	7
15 Everyone I know understands the strategy that is presented in the MTF Balanced Scorecard	1	2	3	4	5	6	7
16 Each department/section has developed objectives that support the MTF's strategy	1	2	3	4	5	6	7
17 Processes / Initiatives that do not support the MTF's strategy have been stopped / eliminated	1	2	3	4	5	6	7
18 Providers, nursing personnel, and administrators work as a team to achieve strategic objectives	1	2	3	4	5	6	7
19 Most employees understand how their department/section objectives are linked to the MTF's strategic objectives	1	2	3	4	5	6	7
20 Resources are allocated to initiatives that support the MTF's strategic objectives	1	2	3	4	5	6	7
21 My actions directly impact the future of the organization and contribute to its success	1	2	3	4	5	6	7
22 My job description reflects the strategic objectives of the organization	1	2	3	4	5	6	7
23 Performance evaluations and annual awards are based on an employee's contributions to department/clinic objectives	1	2	3	4	5	6	7
24 I am encouraged to develop initiatives that support the objectives of my department/section/clinic	1	2	3	4	5	6	7
25 I discuss the strategic objectives of the organization with my co-workers on a regular basis	1	2	3	4	5	6	7
26 Feedback from employees is considered when strategic objectives are established or changed	1	2	3	4	5	6	7
27 Strategic objectives and Balanced Scorecard measures are discussed in staff and committee meetings regularly	1	2	3	4	5	6	7
28 My department/section makes budget decisions based on the strategic objectives that we have established	1	2	3	4	5	6	7
29 Employees in my organization are encouraged to share "best practices"	1	2	3	4	5	6	7
30 Decisions in my organization are based on facts / measured outcomes rather than people's opinions	1	2	3	4	5	6	7
	Very Unfamiliar	Unfamiliar	Somewhat Unfamiliar	Neither Familiar or Unfamiliar	Somewhat Familiar	Familiar	Very Familiar
31 How familiar are you with the Balanced Scorecard?	1	2	3	4	5	6	7

# Appendix C – Development of Survey Questions

Management Question: Are BSC implementation efforts helping SERMC become a Strategy-Focused Organization (SFO)		
Research Questions	Investigative Questions	Measurement Questions
Collect some demographics about person completing survey to assess if dependent variables (i.e. Likert scale questions) vary based on demographics.	Do answers vary based on facility? / Are BSC efforts more effective at a particular facility?	What organization are you assigned to? (circle one)
	Do responses differ based on seniority?	What is your rank or grade? (Contractors put Con)
	Do responses differ based on type of employee?	Employment Status? (Active Duty, Civilian, Contractor, Volunteer)
	Do responses differ based on "traditional" stove pipes?	Organizational Department (provider, nursing, or administrative)
	Does a person's tenure effect their repsonses?	How many years have you worked in the organization?
	Do strategic management efforts go all the way from the top to the bottom of an organization?	At which organizational level do you work? (cmd group, department leadership, section leadership, subordinate employee)
	Does familiarity with the BSC increase the effectiveness of strategic management efforts?	How familiar are you with the Balanced Scorecard?
Has the executive leadership of the organization been effective at mobilizing change?	Does the organization have a clear vision, mission, and strategy?	My MTF has a clearly stated vision, mission, and strategy.
	Has the executive leadership achieved consensus on the vision, mission, and strategy of the organization - or do they give off conflicting signals?	Each member of the command group consistently presents the same vision, mission, strategy
	Has executive leadership prepared the organization for change?	The command group has identified reasons why the MTF needs to change
	Has executive leadership provided the organization with a sense of urgency?	The command group has created a sense of urgency about changing the MTF
The organization's strategy has been translated into operational terms?	Has organization strategy been decomposed into lower-level objectives?	The MTF strategy has been translated into strategic objectives that everyone understands
	Strategic plan is tranlated into a strategy map and a Balanced Scorecard?	These strategic objectives have been assembled into a strategy map that articulates the MTF's strategy
	Strategic plan is tranlated into a strategy map and a Balanced Scorecard?	Measures/metrics have been developed to evaluate the organization's performance against these strategic objectives
	Measures and trargets are balanced across different perspectives?	The strategic objectives and their supporting measures cover financial and non-financial areas
	Have strategic priorities been repeatedly communicated down through the organization?	I understand the strategy that is presented in the MTF Balanced Scorecard
Is the organization aligned with the strategy?	Is business unit strategy is linked to corporate strategy?	Each department/section has developed objectives that support the MTF's strategy
	Are initiatives and action plans aligned and prioritized against the corporate strategy?	Processes / Initiatives that do not support the MTF's strategy have been stopped/eliminated
	Are individual efforts aligned with corporate/collective strategy and objectives?	Providers, nursing personnel, and administrators work as a team to achieve strategic objectives
	Are business unit objectives, measures, and targets linked and aligned with corporate objectives, measures, and targets?	Employees understand how their department/section objectives are linked to the MTF's strategic objectives
	Are initiatives and action plans aligned and prioritized against the corporate strategy?	Resources are allocated to initiatives that support the MTF's strategic objectives

Research Questions	Investigative Questions	Measurement Questions
Has the organization made strategy everyone's job?	Do individuals understand their role in corporate strategy and believe that they can make a difference?	My actions directly impact the future of the my organization and contribute to its success
	Are team/individual objectives and goals aligned with the strategy of the organization?	My job description reflects the strategic objectives of the organization
	Are contributions recognized and rewarded?	Performance evaluations and annual awards are based on an employee's contributions to department/clinic objectives
	Do management and communication processes enable learning and best practice sharing?	I am encouraged to develop initiatives that support the objectives of my department/section/clinic
Is strategic management a continual process?	Do employees have foremost awareness of the corporate strategy?	I discuss the strategic objectives of the organization with my co-workers
	Are ideas and feedback from teams/individuals heard and acted upon?	Feedback from employees is considered when hospital/department objectives are established or changed
	Is the BSC an integral part of strategic planning and business process?	Strategic objectives and Balanced Scorecard measures are discussed in staff and committee meetings
	Is the budget driven by the strategy?	My department/section budget supports the strategic objectives that we have established
	Do management and communication processes enable learning and best practice sharing?	Employees in my organization are encouraged to share "best practices"
	Do leaders at all levels make decisions based on timely, accurate measurement and analysis?	Decisions in my organization are based on facts / measured outcomes rather than people's opinions

Appendix D - Survey Distribution Instructions

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## Balanced Scorecard Strategic Focus Assessment Survey

Ladies and Gentlemen –

This packet contains 200 surveys designed to collect information about our implementation of the Balanced Scorecard (BSC) within SERMC. Completed survey instruments will help us evaluate current BSC efforts and refine future efforts within the region. Please assist the command by distributing these surveys throughout your organization and encouraging your staff to complete them.

The survey is designed so respondents may simply fold, staple, and place the completed survey in official mail (either sent through distribution or through the unit mail room). The return address on the back of the survey will ensure that it is returned to me, the survey officer. However, if you feel it is better for your facility to centrally collect the surveys and then mail them to me in bulk, please do so by locally modifying the survey instructions.

Distribution of the surveys should include all areas of your facility, but please ensure that the Commander, Deputy Commanders, Department Chiefs/Head Nurses/NCOICs, and Staff Section OICs/NCOICs receive a survey. The remaining surveys may be given to anyone that works at your MTF. **All surveys should be completed by 31 January.**

As part of my graduate management project, I will aggregate and analyze the survey results for the command. The subsequent paper will provide an assessment of the SERMC as a strategy focused organization using the five principles identified by Kaplan and Norton. Each MTF will be provided a copy of the results. If you would like, I can perform the same analysis for your MTF using only the responses from your staff. All of this will be completed by this summer.

Please contact me if you would like the survey materials electronically and I will send them to you. If you have questions or require further information, please contact me by phone at DSN 787-7645 or by email at [Mark.Swofford@se.amedd.army.mil](mailto:Mark.Swofford@se.amedd.army.mil).

Thank you for your assistance.

**MAJ Mark Swofford**

**Southeast Regional Medical Command**

**U.S. Army - Baylor Program Administrative Resident**

**phone: (706) 787-7645**

**email: [Mark.Swofford@se.amedd.army.mil](mailto:Mark.Swofford@se.amedd.army.mil)**



## Appendix E – Descriptive Statistics

Table E1 – SFO Principle Factor Mean Response Scores by Demographic Category

Demographic Category	Number of Respondent s	SFO Principles									
		Principle One		Principle Two		Principle Three		Principle Four		Principle Five	
		M	SD	M	SD	M	SD	M	SD	M	SD
Organization											
Member of SERMC Staff	26	5.17	1.03	4.51	0.97	4.23	0.99	4.82	1.11	4.62	0.93
Member of Blanchfield	109	5.06	1.42	4.00	1.30	4.06	1.32	4.51	1.40	4.10	1.35
Member of Eisenhower	138	5.31	0.95	4.12	1.12	4.15	1.20	5.04	1.12	4.49	1.25
Member of Fox	104	5.47	1.08	4.37	1.15	4.46	1.12	4.77	1.23	4.31	1.34
Member of Lyster	94	5.45	0.99	4.41	0.98	4.47	0.88	5.07	1.06	4.52	1.07
Member of Martin	87	5.69	1.14	4.54	1.24	4.37	1.14	4.98	1.10	4.53	1.28
Member of Moncrief	69	6.37	0.64	5.70	0.86	5.11	1.06	5.49	1.24	5.18	1.26
Member of Winn	122	5.63	1.07	4.94	1.14	4.56	1.21	5.05	1.25	4.84	1.29
Duty Status											
Duty Status is Active Duty	351	5.59	0.99	4.61	1.14	4.42	1.11	5.16	1.08	4.75	1.15
Duty Status is DA Civilian	372	5.46	1.20	4.45	1.29	4.39	1.24	4.78	1.32	4.36	1.37
Duty Status is Contractor	26	4.99	1.48	4.14	1.20	4.45	1.31	4.81	1.35	4.34	1.41
Professional Type											
Respondent is a Provider	145	5.58	1.05	4.56	1.26	4.44	1.12	5.12	1.23	4.62	1.26
Respondent is Nursing Personnel	260	5.39	1.17	4.31	1.20	4.37	1.18	4.88	1.21	4.36	1.30
Respondent is Administrative Personnel	344	5.55	1.11	4.65	1.20	4.42	1.20	4.95	1.24	4.65	1.27
Organizational Level											
Org Level is Executive Management	45	6.18	0.73	5.34	1.03	4.88	1.05	5.73	0.94	5.44	0.97
Org Level is ACoFS or Department Head	153	5.81	0.91	4.80	1.11	4.58	1.10	5.42	1.02	4.97	1.15
Org Level is Clinic or Section Head	157	5.71	1.01	4.63	1.18	4.35	1.24	5.16	1.12	4.69	1.27
Org Level is Clinic or Section Employee	394	5.22	1.20	4.26	1.23	4.30	1.18	4.61	1.26	4.22	1.27
Rank											
All WG6 to GS6	137	5.19	1.28	4.24	1.23	4.34	1.29	4.56	1.41	4.06	1.41
All GS7 to GS9	84	5.56	1.11	4.63	1.22	4.53	1.20	4.80	1.29	4.58	1.25
All GS10 to GS11	105	5.69	1.03	4.40	1.38	4.30	1.21	4.87	1.22	4.36	1.37
All GS12 to GS15	46	5.53	1.37	4.83	1.25	4.50	1.20	5.19	1.24	4.88	1.28
All PVT to SPC	34	5.18	0.85	4.28	0.83	4.36	0.91	4.71	0.97	4.31	1.06
All SGT to SSG	48	5.29	1.00	4.53	1.01	4.56	1.00	4.81	1.07	4.64	1.13
All SFC to CSM	48	5.80	1.12	4.72	1.11	4.68	1.16	5.41	1.10	4.98	1.11
All 2LT to CPT	71	5.66	1.01	4.71	1.11	4.55	1.04	5.23	1.07	4.77	1.16
All CW3 and MAJ	72	5.58	0.97	4.55	1.11	4.20	1.15	5.16	1.00	4.71	1.03
All LTC and COL	78	5.76	0.88	4.73	1.38	4.27	1.20	5.36	1.11	4.86	1.28
Rank of Contractor	26	4.99	1.48	4.14	1.20	4.45	1.31	4.81	1.35	4.34	1.41

Table E2 - Breakdown of Survey Responses by Demographic Category

Demographic Categories			Organization								Duty Status		
	# of Responses	AVG Years in Org	SERMC Staff	Balchfield	Eisenhower	Fox	Lyster	Martin	Moncrief	Winn	Active Duty	DA Civilian	Contractor
<b>Organization</b>													
SERMC Staff	26	4.18462									1	11	5
Balchfield	109	6.07578									34	72	3
Eisenhower	138	5.16812									86	51	1
Fox	104	6.65856									37	60	7
Lyster	94	6.15915									42	43	9
Martin	87	6.9454									43	44	0
Moncrief	69	5.92899									37	32	0
Winn	122	5.54738									62	59	1
<b>Duty Status</b>													
Active Duty	351	1.92262	1	34	86	37	42	43	37	62			
DA Civilian	372	9.58481	11	72	51	60	43	44	32	59			
Contractor	26	7.90192	5	3	1	7	9	0	0	1			
<b>Professional Discipline</b>													
Provider	145	3.75276	1	15	25	15	21	33	14	21	105	34	6
Nursing	260	5.74973	2	47	57	45	34	20	20	35	131	118	11
Administrator	344	6.9964	23	47	56	44	39	34	35	66	115	220	9
<b>Organizational Level</b>													
Executive Management	45	3.16111	2	8	1	7	7	3	8	9	32	13	0
ACoS / Department Head	153	4.21647	6	17	35	10	16	21	21	27	116	37	0
Clinic / Section Head	157	5.30541	6	11	30	9	15	31	16	39	107	49	1
Clinic / Section Employee	394	7.17137	12	73	72	78	56	32	24	47	96	273	25
<b>Rank</b>													
WG6-GS6	137	7.75449	1	46	17	25	25	3	6	13	0	137	0
GS7 - GS9	84	11.18131	3	11	16	14	7	6	7	20	0	84	0
GS10-GS11	105	10.70436	2	11	14	14	8	25	12	19	0	105	0
GS12 - GS15	46	9.72174	5	3	4	7	3	10	7	7	0	46	0
PVT - SPC	34	1.40147	0	0	12	16	5	0	0	1	34	0	0
SGT - SSG	48	2.03396	0	4	11	10	7	1	6	9	48	0	0
SFC - CSM	48	1.73333	3	5	16	4	6	0	5	9	48	0	0
2LT - CPT	71	1.64718	0	8	11	3	11	11	12	15	71	0	0
CW3-MAJ	72	1.65639	4	11	14	1	5	18	8	11	72	0	0
LTC - COL	78	2.66646	3	7	22	3	8	13	6	17	78	0	0
CON	26	7.90192	5	3	1	7	9	0	0	1	0	0	26





Table E3 - Distribution of Survey Responses based on SFO Principle Factors

Related SFO Principle	Question	# of Responses	# of Substitute Averages	Distribution of Survey Responses							Mean	STD
				1	2	3	4	5	6	7		
Mobilize change through executive leadership	7a	749	0	10	9	12	42	74	299	303	6.03	1.18
	7b	749	0	11	8	11	38	67	297	317	6.07	1.18
	7c	749	0	12	15	36	86	105	268	227	5.63	1.39
	8	749	0	15	32	47	115	136	243	161	5.27	1.49
	9	748	1	19	43	42	159	126	223	136	5.06	1.54
Translate the strategy into operational terms	10	748	1	19	38	39	201	148	177	126	4.95	1.50
	11	748	1	27	57	75	169	174	166	80	4.64	1.55
	12	744	5	25	50	43	248	119	168	91	4.69	1.52
	13	746	3	15	35	36	269	143	180	68	4.75	1.36
	14	749	0	15	24	37	279	122	198	74	4.81	1.34
Align the organization to the strategy	15	748	1	79	92	123	245	125	64	20	3.69	1.50
	16	749	0	26	72	57	252	167	143	32	4.36	1.42
	17	749	0	26	43	68	366	123	99	24	4.22	1.25
	18	748	1	32	56	56	158	196	192	58	4.66	1.52
	19	748	1	41	81	92	192	174	135	33	4.22	1.53
Make strategy everyone's job	20	748	1	28	39	45	260	170	154	52	4.57	1.40
	21	748	1	13	22	15	91	140	244	223	5.60	1.38
	22	748	1	25	32	24	159	162	222	124	5.09	1.49
	23	748	1	52	55	60	144	150	184	102	4.67	1.72
	24	748	1	24	32	41	117	150	241	143	5.18	1.53
Make strategy a continual process	25	748	1	62	92	72	156	165	135	66	4.26	1.73
	26	748	1	53	58	49	209	160	158	61	4.45	1.61
	27	748	1	56	71	72	243	133	132	40	4.18	1.58
	28	748	1	37	40	57	259	138	157	60	4.51	1.49
	29	748	1	29	33	41	127	174	219	125	5.06	1.54
(Familiarity with BS	30	748	1	48	47	65	199	160	160	69	4.51	1.60
	31	747	2	127	81	52	102	195	129	60	4.05	1.92

Table E4 - SFO Principle Factor Mean Response Scores with Standard Deviations

SFO Principle Factors	<i>M</i>	<i>SD</i>
Principle Factor One - Mobilize change through executive leadership	5.50	1.12
Principle Factor Two - Translate the strategy into operational terms	4.51	1.22
Principle Factor Three - Align the organization to the strategy	4.40	1.18
Principle Factor Four - Make strategy everyone's job	4.96	1.23
Principle Factor Five - Make strategy a continual process	4.54	1.29

Table E5 - Formatin of Rank Groups

Rank Group	Individual Responses Comprising the Group	Number of Responses	
		In Each Rank	By Rank Group
<b>WG6-GS6</b>			<b>137</b>
	WG6	1	
	WG11	2	
	GS4	49	
	GS5	57	
	GS6	28	
<b>GS7 - GS9</b>			<b>84</b>
	GS7	31	
	GS8	9	
	GS9	44	
<b>GS10-GS11</b>			<b>105</b>
	GS10	30	
	GS11	75	
<b>GS12 - GS15</b>			<b>46</b>
	GS12	31	
	GS13	5	
	GS14	7	
	GS15	3	
<b>PVT - SPC</b>			<b>34</b>
	PVT	0	
	PV2	0	
	PFC	7	
	SPC	27	
<b>SGT - SSG</b>			<b>48</b>
	SGT	24	
	SSG	24	
<b>SFC - CSM</b>			<b>48</b>
	SFC	30	
	MSG	14	
	SGM	2	
	CSM	2	
<b>2LT - CPT</b>			<b>71</b>
	2LT	0	
	1LT	5	
	CPT	66	
<b>CW3-MAJ</b>			<b>72</b>
	CW3	1	
	MAJ	71	
<b>LTC - COL</b>			<b>78</b>
	LTC	60	
	COL	18	
<b>CON</b>			<b>26</b>
<b>Total</b>			<b>749</b>

Appendix F - By Question Results for the Demographic Category  
Organization of Assignment

Figure 1 - Mean Response Scores by Organization

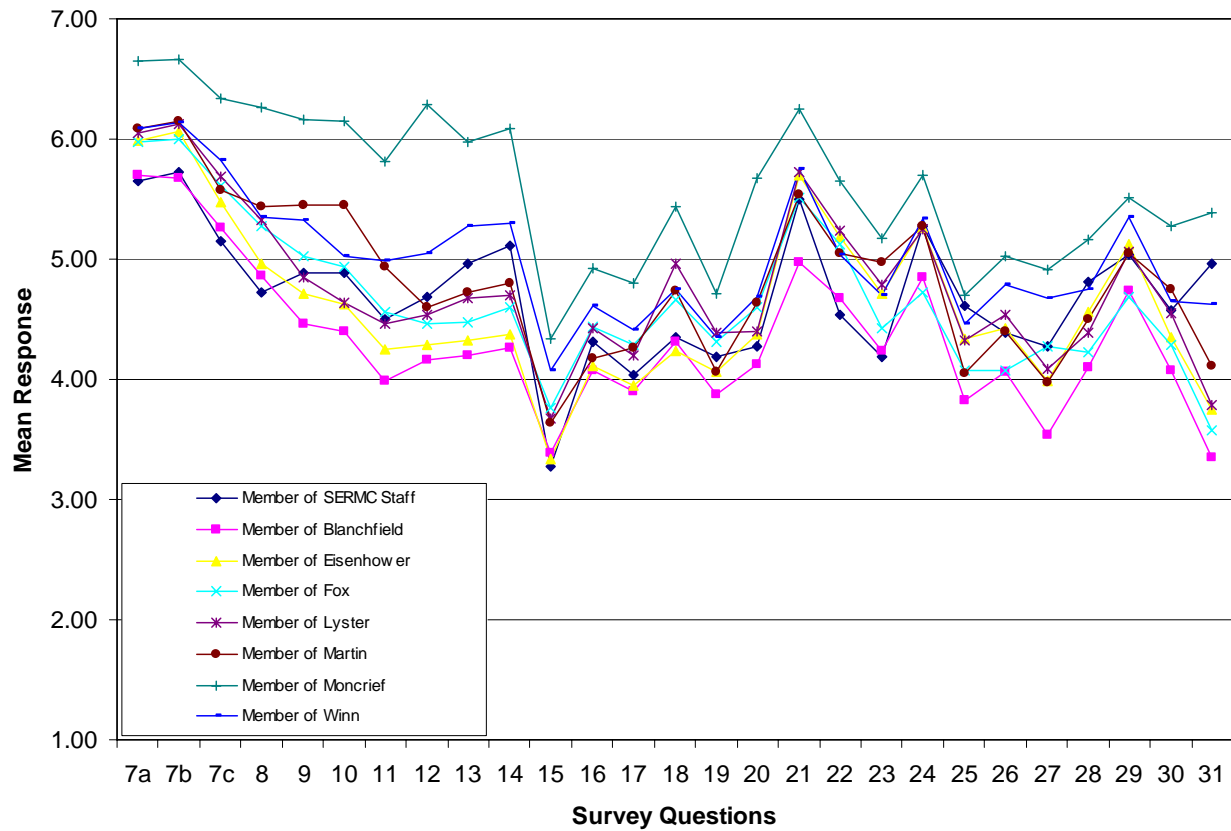


Table F1 - Survey Question and Factor Mean Response Scores by Organization of Assignment

Organization		Number of Responses	AVG Years in Org	SFO Principle One Survey Questions						Overall for Principle One	
				7a	7b	7c	8	9	10	Mean	SD
1	SERMC Staff	26	4.18	5.65	5.73	5.15	4.73	4.88	4.88	5.17	1.03
2	Balnchfield	109	6.08	5.70	5.68	5.27	4.86	4.47	4.39	5.06	1.42
3	Eisenhower	138	5.17	5.99	6.06	5.48	4.96	4.72	4.63	5.31	0.95
4	Fox	104	6.66	5.97	6.00	5.62	5.28	5.02	4.93	5.47	1.08
5	Lyster	94	6.16	6.05	6.13	5.69	5.33	4.85	4.64	5.45	0.99
6	Martin	87	6.95	6.09	6.15	5.57	5.44	5.45	5.45	5.69	1.14
7	Moncrief	69	5.93	6.65	6.67	6.33	6.26	6.16	6.14	6.37	0.64
8	Winn	122	5.55	6.09	6.14	5.83	5.35	5.33	5.02	5.63	1.07

Organization		Number of Responses	AVG Years in Org	SFO Principle Two Survey Questions					Overall for Principle Two	
				11	12	13	14	15	Mean	SD
1	SERMC Staff	26	4.18	4.50	4.69	4.96	5.12	3.27	4.51	0.97
2	Balnchfield	109	6.08	3.99	4.17	4.20	4.26	3.39	4.00	1.30
3	Eisenhower	138	5.17	4.25	4.29	4.32	4.38	3.34	4.12	1.12
4	Fox	104	6.66	4.56	4.46	4.48	4.60	3.76	4.37	1.15
5	Lyster	94	6.16	4.47	4.54	4.67	4.70	3.68	4.41	0.98
6	Martin	87	6.95	4.94	4.61	4.72	4.80	3.63	4.54	1.24
7	Moncrief	69	5.93	5.81	6.29	5.97	6.09	4.34	5.70	0.86
8	Winn	122	5.55	4.99	5.05	5.27	5.30	4.07	4.94	1.14

Organization		Number of Responses	AVG Years in Org	SFO Principle Three Survey Questions					Overall for Principle Three	
				16	17	18	19	20	Mean	SD
1	SERMC Staff	26	4.18	4.31	4.04	4.35	4.19	4.27	4.23	0.99
2	Balnchfield	109	6.08	4.07	3.90	4.32	3.87	4.12	4.06	1.32
3	Eisenhower	138	5.17	4.12	3.95	4.24	4.07	4.37	4.15	1.20
4	Fox	104	6.66	4.43	4.29	4.66	4.32	4.60	4.46	1.12
5	Lyster	94	6.16	4.43	4.20	4.96	4.38	4.40	4.47	0.88
6	Martin	87	6.95	4.17	4.26	4.74	4.06	4.64	4.37	1.14
7	Moncrief	69	5.93	4.93	4.80	5.43	4.71	5.68	5.11	1.06
8	Winn	122	5.55	4.61	4.42	4.75	4.35	4.69	4.56	1.21

Organization	Number of Responses	AVG Years in Org	SFO Principle Four Survey Questions					Overall for Principle Four	
			21	22	23	24	25	Mean	SD
1 SERMC Staff	26	4.18	5.50	4.54	4.19	5.27	4.62	4.82	1.11
2 Balnchfield	109	6.08	4.97	4.68	4.24	4.85	3.83	4.51	1.40
3 Eisenhower	138	5.17	5.70	5.19	4.72	5.26	4.34	5.04	1.12
4 Fox	104	6.66	5.51	5.13	4.43	4.73	4.08	4.77	1.23
5 Lyster	94	6.16	5.72	5.23	4.79	5.26	4.33	5.07	1.06
6 Martin	87	6.95	5.54	5.05	4.98	5.28	4.05	4.98	1.10
7 Moncrief	69	5.93	6.25	5.65	5.17	5.70	4.70	5.49	1.24
8 Winn	122	5.55	5.75	5.03	4.70	5.34	4.46	5.05	1.25

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Organization	Number of Responses	AVG Years in Org	SFO Principle Five Survey Questions					Overall for Principle Five	
			26	27	28	29	30	Mean	SD
1 SERMC Staff	26	4.18	4.38	4.27	4.81	5.04	4.58	4.62	0.93
2 Balnchfield	109	6.08	4.06	3.54	4.11	4.74	4.07	4.10	1.35
3 Eisenhower	138	5.17	4.43	3.99	4.57	5.13	4.35	4.49	1.25
4 Fox	104	6.66	4.08	4.27	4.23	4.68	4.29	4.31	1.34
5 Lyster	94	6.16	4.53	4.09	4.38	5.06	4.55	4.52	1.07
6 Martin	87	6.95	4.40	3.98	4.49	5.05	4.75	4.53	1.28
7 Moncrief	69	5.93	5.03	4.91	5.16	5.51	5.28	5.18	1.26
8 Winn	122	5.55	4.79	4.68	4.75	5.34	4.65	4.84	1.29

Table F2 - Analysis of Variance and F Ratios for the Demographic Category  
Organization of Assignment

	<i>Source</i>	<i>Sum of Squares</i>	<i>Mean Square</i>	<i>F</i>
Survey Question 7a	Between Groups	43.83	6.26	4.63**
	Within Groups	1002.46	1.35	
	Total	1046.29		
Survey Question 7b	Between Groups	46.20	6.60	4.95**
	Within Groups	987.90	1.33	
	Total	1034.11		
Survey Question 7c	Between Groups	63.06	9.01	4.86**
	Within Groups	1373.76	1.85	
	Total	1436.82		
Survey Question 8	Between Groups	110.56	15.79	7.53**
	Within Groups	1554.03	2.10	
	Total	1664.60		
Survey Question 9	Between Groups	164.80	23.54	10.79**
	Within Groups	1617.24	2.18	
	Total	1782.05		
Survey Question 10	Between Groups	177.74	25.39	12.51**
	Within Groups	1504.12	2.03	
	Total	1681.86		
Survey Question 11	Between Groups	188.07	26.87	12.34**
	Within Groups	1613.02	2.18	
	Total	1801.09		
Survey Question 12	Between Groups	252.68	36.10	18.12**
	Within Groups	1475.73	1.99	
	Total	1728.40		
Survey Question 13	Between Groups	203.63	29.09	18.46**
	Within Groups	1167.98	1.58	
	Total	1371.61		
Survey Question 14	Between Groups	209.70	29.96	19.45**
	Within Groups	1141.50	1.54	
	Total	1351.20		
Survey Question 15	Between Groups	79.79	11.40	5.24**
	Within Groups	1611.87	2.18	
	Total	1691.66		
Survey Question 16	Between Groups	50.90	7.27	3.70**
	Within Groups	1457.77	1.97	
	Total	1508.67		
Survey Question 17	Between Groups	50.63	7.23	4.77**
	Within Groups	1123.76	1.52	
	Total	1174.39		

Survey Question 18	Between Groups	91.06	13.01	5.87**
	Within Groups	1641.95	2.22	
	Total	1733.01		
Survey Question 19	Between Groups	40.90	5.84	2.52*
	Within Groups	1718.26	2.32	
	Total	1759.16		
Survey Question 20	Between Groups	119.56	17.08	9.42**
	Within Groups	1343.68	1.81	
	Total	1463.24		
Survey Question 21	Between Groups	79.15	11.31	6.24**
	Within Groups	1341.92	1.81	
	Total	1421.07		
Survey Question 22	Between Groups	52.05	7.44	3.44*
	Within Groups	1602.95	2.16	
	Total	1655.00		
Survey Question 23	Between Groups	59.93	8.56	2.94*
	Within Groups	2160.07	2.92	
	Total	2220.00		
Survey Question 24	Between Groups	56.27	8.04	3.53**
	Within Groups	1685.00	2.27	
	Total	1741.27		
Survey Question 25	Between Groups	50.36	7.19	2.43*
	Within Groups	2197.87	2.97	
	Total	2248.23		
Survey Question 26	Between Groups	69.11	9.87	3.89**
	Within Groups	1879.86	2.54	
	Total	1948.97		
Survey Question 27	Between Groups	122.51	17.50	7.48**
	Within Groups	1734.10	2.34	
	Total	1856.60		
Survey Question 28	Between Groups	66.08	9.44	4.39**
	Within Groups	1592.79	2.15	
	Total	1658.87		
Survey Question 29	Between Groups	50.09	7.16	3.09*
	Within Groups	1718.20	2.32	
	Total	1768.29		
Survey Question 30	Between Groups	77.84	11.12	4.50**
	Within Groups	1831.03	2.47	
	Total	1908.87		
Survey Question 31	Between Groups	281.66	40.24	11.99**
	Within Groups	2486.41	3.36	
	Total	2768.06		

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 $df = 7, 741$ 

\*  $p < .05$ 

\*\*  $p < .001$

Table F3 - Significant Differences in Organization of Assignment Group Mean Response Scores

Dependent Variable	Organization 1	Organization 2	Mean Difference (1-2)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Survey Question 7a	MACH	EAMC	0.66	0.17	0.00	-1.01	-0.30
Survey Question 7a	MACH	BACH	0.95	0.18	0.00	-1.47	-0.44
Survey Question 7a	MACH	FACH	0.68	0.18	0.00	-1.11	-0.25
Survey Question 7a	MACH	WACH	0.56	0.18	0.00	0.16	0.97
Survey Question 7a	MACH	LACH	0.60	0.18	0.00	-1.06	-0.13
Survey Question 7a	MACH	BMACH	0.56	0.19	0.01	-1.03	-0.09
Survey Question 7a	MACH	SERMC Staff	1.00	0.27	0.01	-1.83	-0.17
Survey Question 7b	MACH	BACH	0.99	0.18	0.00	0.47	1.50
Survey Question 7b	MACH	EAMC	0.61	0.17	0.00	0.27	0.95
Survey Question 7b	MACH	FACH	0.67	0.18	0.00	0.24	1.09
Survey Question 7b	MACH	WACH	0.53	0.17	0.00	0.12	0.93
Survey Question 7b	MACH	LACH	0.54	0.18	0.00	0.11	0.97
Survey Question 7b	MACH	BMACH	0.52	0.19	0.02	0.05	0.98
Survey Question 7b	MACH	SERMC Staff	0.94	0.27	0.02	0.10	1.77
Survey Question 7c	MACH	BACH	1.07	0.21	0.00	0.47	1.67
Survey Question 7c	MACH	EAMC	0.86	0.20	0.00	0.36	1.35
Survey Question 7c	MACH	FACH	0.72	0.21	0.00	0.18	1.25
Survey Question 7c	MACH	BMACH	0.76	0.22	0.00	0.17	1.34
Survey Question 7c	MACH	SERMC Staff	1.18	0.31	0.01	0.22	2.14
Survey Question 7c	MACH	LACH	0.64	0.22	0.01	0.08	1.21
Survey Question 7c	MACH	WACH	0.51	0.21	0.04	0.02	0.99
Survey Question 8	MACH	EAMC	1.30	0.21	0.00	0.77	1.84
Survey Question 8	MACH	BACH	1.40	0.22	0.00	0.76	2.04
Survey Question 8	MACH	FACH	0.98	0.22	0.00	0.41	1.55
Survey Question 8	MACH	LACH	0.93	0.23	0.00	0.38	1.49
Survey Question 8	MACH	WACH	0.91	0.22	0.00	0.36	1.46
Survey Question 8	MACH	SERMC Staff	1.53	0.33	0.00	0.58	2.48
Survey Question 8	MACH	BMACH	0.82	0.23	0.00	0.23	1.42
Survey Question 9	MACH	BACH	1.69	0.23	0.00	-2.34	-1.04
Survey Question 9	MACH	LACH	1.31	0.23	0.00	0.71	1.91
Survey Question 9	MACH	EAMC	1.44	0.22	0.00	-1.99	-0.89
Survey Question 9	MACH	FACH	1.14	0.23	0.00	0.50	1.78
Survey Question 9	MACH	WACH	0.83	0.22	0.00	0.26	1.40
Survey Question 9	BMACH	BACH	0.98	0.21	0.00	-1.68	-0.28
Survey Question 9	WACH	BACH	0.86	0.19	0.00	-1.50	-0.22
Survey Question 9	MACH	SERMC Staff	1.27	0.34	0.00	0.32	2.23
Survey Question 9	BMACH	EAMC	0.73	0.20	0.01	-1.34	-0.12
Survey Question 9	WACH	EAMC	0.61	0.18	0.02	-1.15	-0.07
Survey Question 9	MACH	BMACH	0.71	0.24	0.02	0.07	1.35
Survey Question 10	MACH	EAMC	1.51	0.21	0.00	-2.06	-0.97
Survey Question 10	MACH	BACH	1.75	0.22	0.00	-2.36	-1.14
Survey Question 10	MACH	LACH	1.51	0.23	0.00	0.96	2.06
Survey Question 10	MACH	FACH	1.21	0.22	0.00	0.63	1.79
Survey Question 10	MACH	WACH	1.12	0.21	0.00	0.53	1.71
Survey Question 10	BMACH	BACH	1.05	0.20	0.00	-1.71	-0.40
Survey Question 10	MACH	SERMC Staff	1.26	0.33	0.00	0.42	2.10
Survey Question 10	BMACH	EAMC	0.82	0.20	0.00	-1.41	-0.22
Survey Question 10	BMACH	LACH	0.81	0.21	0.00	-1.41	-0.21
Survey Question 10	MACH	BMACH	0.70	0.23	0.01	0.10	1.30

Dependent Variable	Organization 1	Organization 2	Mean Difference (1-2)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Survey Question 11	MACH	BACH	1.82	0.23	0.00	-2.48	-1.17
Survey Question 11	MACH	LACH	1.34	0.23	0.00	0.75	1.93
Survey Question 11	MACH	EAMC	1.56	0.22	0.00	-2.14	-0.97
Survey Question 11	MACH	FACH	1.25	0.23	0.00	0.63	1.88
Survey Question 11	WACH	BACH	1.00	0.19	0.00	-1.65	-0.36
Survey Question 11	MACH	SERMC Staff	1.31	0.34	0.00	0.40	2.23
Survey Question 11	MACH	WACH	0.82	0.22	0.00	0.21	1.43
Survey Question 11	BMACH	BACH	0.95	0.21	0.00	-1.66	-0.23
Survey Question 11	WACH	EAMC	0.74	0.18	0.00	-1.31	-0.16
Survey Question 11	MACH	BMACH	0.87	0.24	0.00	0.19	1.55
Survey Question 11	BMACH	EAMC	0.68	0.20	0.03	-1.34	-0.03
Survey Question 12	MACH	BMACH	1.68	0.23	0.00	1.09	2.28
Survey Question 12	MACH	EAMC	2.00	0.21	0.00	-2.52	-1.48
Survey Question 12	MACH	WACH	1.24	0.21	0.00	0.71	1.78
Survey Question 12	MACH	BACH	2.12	0.22	0.00	-2.71	-1.54
Survey Question 12	MACH	LACH	1.75	0.22	0.00	1.21	2.28
Survey Question 12	MACH	FACH	1.83	0.22	0.00	-2.38	-1.29
Survey Question 12	MACH	SERMC Staff	1.60	0.32	0.00	0.71	2.49
Survey Question 12	WACH	BACH	0.88	0.19	0.00	-1.51	-0.26
Survey Question 12	WACH	EAMC	0.76	0.18	0.00	-1.32	-0.20
Survey Question 12	WACH	FACH	0.59	0.19	0.04	-1.17	-0.01
Survey Question 13	WACH	EAMC	0.95	0.16	0.00	-1.42	-0.48
Survey Question 13	WACH	BACH	1.07	0.17	0.00	-1.61	-0.53
Survey Question 13	MACH	EAMC	1.65	0.19	0.00	-2.13	-1.18
Survey Question 13	MACH	LACH	1.30	0.20	0.00	-1.81	-0.79
Survey Question 13	MACH	BACH	1.77	0.19	0.00	-2.32	-1.22
Survey Question 13	MACH	FACH	1.49	0.19	0.00	-2.04	-0.94
Survey Question 13	MACH	BMACH	1.25	0.20	0.00	0.67	1.83
Survey Question 13	WACH	FACH	0.79	0.17	0.00	-1.33	-0.25
Survey Question 13	MACH	WACH	0.70	0.19	0.00	0.19	1.21
Survey Question 13	MACH	SERMC Staff	1.01	0.29	0.01	0.20	1.82
Survey Question 13	WACH	LACH	0.60	0.17	0.01	-1.10	-0.09
Survey Question 14	WACH	EAMC	0.93	0.15	0.00	-1.39	-0.47
Survey Question 14	MACH	BACH	1.83	0.19	0.00	-2.37	-1.29
Survey Question 14	MACH	EAMC	1.71	0.18	0.00	-2.17	-1.25
Survey Question 14	MACH	LACH	1.38	0.20	0.00	-1.90	-0.87
Survey Question 14	WACH	BACH	1.05	0.16	0.00	-1.58	-0.51
Survey Question 14	MACH	FACH	1.49	0.19	0.00	-2.02	-0.96
Survey Question 14	MACH	BMACH	1.28	0.20	0.00	0.71	1.85
Survey Question 14	MACH	WACH	0.78	0.19	0.00	0.29	1.28
Survey Question 14	WACH	FACH	0.71	0.17	0.00	-1.23	-0.18
Survey Question 14	WACH	LACH	0.60	0.17	0.01	-1.11	-0.09
Survey Question 14	MACH	SERMC Staff	0.97	0.29	0.01	0.17	1.78
Survey Question 14	SERMC Staff	BACH	0.86	0.27	0.04	-1.69	-0.03
Survey Question 15	MACH	EAMC	1.00	0.22	0.00	-1.66	-0.35
Survey Question 15	MACH	BACH	0.96	0.23	0.00	-1.66	-0.25
Survey Question 15	WACH	EAMC	0.73	0.18	0.00	-1.31	-0.16
Survey Question 15	WACH	BACH	0.69	0.19	0.02	-1.32	-0.06
Survey Question 15	MACH	SERMC Staff	1.07	0.34	0.04	0.03	2.11
Survey Question 15	MACH	LACH	0.66	0.23	0.04	0.02	1.31

Dependent Variable	Organization 1	Organization 2	Mean Difference (1-2)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Survey Question 16	MACH	EAMC	0.81	0.21	0.00	0.19	1.44
Survey Question 16	MACH	BACH	0.85	0.22	0.00	0.18	1.53
Survey Question 16	MACH	BMACH	0.76	0.23	0.03	0.05	1.46
Survey Question 17	MACH	BACH	0.90	0.19	0.00	0.27	1.53
Survey Question 17	MACH	EAMC	0.85	0.18	0.00	0.25	1.44
Survey Question 17	MACH	LACH	0.59	0.20	0.04	0.02	1.17
Survey Question 18	MACH	EAMC	1.20	0.22	0.00	-1.83	-0.56
Survey Question 18	MACH	BACH	1.12	0.23	0.00	-1.79	-0.44
Survey Question 18	LACH	EAMC	0.72	0.20	0.01	-1.31	-0.12
Survey Question 18	MACH	FACH	0.77	0.23	0.01	0.12	1.42
Survey Question 18	MACH	BMACH	0.70	0.24	0.02	0.05	1.35
Survey Question 18	MACH	WACH	0.68	0.22	0.03	0.05	1.31
Survey Question 18	MACH	SERMC Staff	1.09	0.34	0.03	0.08	2.10
Survey Question 18	LACH	BACH	0.64	0.21	0.05	-1.28	0.00
Survey Question 19	MACH	BACH	0.84	0.23	0.01	-1.53	-0.14
Survey Question 20	MACH	LACH	1.28	0.21	0.00	0.71	1.85
Survey Question 20	MACH	BACH	1.56	0.21	0.00	0.97	2.15
Survey Question 20	MACH	EAMC	1.31	0.20	0.00	0.76	1.86
Survey Question 20	MACH	FACH	1.09	0.21	0.00	0.50	1.67
Survey Question 20	MACH	WACH	0.99	0.20	0.00	0.43	1.56
Survey Question 20	MACH	BMACH	1.04	0.22	0.00	0.44	1.63
Survey Question 20	MACH	SERMC Staff	1.41	0.31	0.00	0.45	2.38
Survey Question 21	MACH	BACH	1.28	0.21	0.00	-1.93	-0.63
Survey Question 21	MACH	FACH	0.74	0.21	0.00	0.17	1.31
Survey Question 21	WACH	BACH	0.78	0.18	0.00	-1.40	-0.15
Survey Question 21	MACH	BMACH	0.71	0.22	0.01	0.12	1.29
Survey Question 21	EAMC	BACH	0.73	0.17	0.01	-1.35	-0.12
Survey Question 21	LACH	BACH	0.75	0.19	0.01	-1.39	-0.11
Survey Question 21	MACH	EAMC	0.54	0.20	0.04	-1.07	-0.02
Survey Question 22	MACH	BACH	0.97	0.23	0.00	-1.68	-0.27
Survey Question 23	MACH	BACH	0.94	0.26	0.02	-1.78	-0.09
Survey Question 23	BMACH	BACH	0.74	0.25	0.04	-1.46	-0.03
Survey Question 24	MACH	FACH	0.96	0.23	0.00	0.19	1.74
Survey Question 24	MACH	BACH	0.84	0.23	0.02	0.09	1.60
Survey Question 25	MACH	BACH	0.87	0.26	0.02	-1.66	-0.07
Survey Question 26	MACH	FACH	0.95	0.25	0.00	-1.70	-0.20
Survey Question 26	MACH	BACH	0.97	0.25	0.00	-1.74	-0.20
Survey Question 26	WACH	FACH	0.71	0.21	0.02	-1.37	-0.05
Survey Question 26	WACH	BACH	0.73	0.21	0.02	-1.40	-0.05
Survey Question 27	MACH	BACH	1.37	0.24	0.00	-2.11	-0.63
Survey Question 27	WACH	BACH	1.14	0.20	0.00	-1.78	-0.49
Survey Question 27	MACH	EAMC	0.93	0.23	0.00	-1.63	-0.23
Survey Question 27	MACH	BMACH	0.94	0.25	0.00	-1.68	-0.19
Survey Question 27	MACH	LACH	0.83	0.24	0.01	-1.53	-0.12
Survey Question 27	WACH	EAMC	0.69	0.19	0.01	-1.30	-0.09
Survey Question 27	FACH	BACH	0.73	0.21	0.02	-1.38	-0.07
Survey Question 27	WACH	BMACH	0.70	0.21	0.02	-1.35	-0.05

Dependent Variable	Organization 1	Organization 2	Mean Difference (1-2)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Survey Question 28	MACH	BACH	1.05	0.23	0.00	-1.77	-0.34
Survey Question 28	MACH	FACH	0.93	0.23	0.00	-1.67	-0.19
Survey Question 28	MACH	LACH	0.78	0.23	0.01	-1.45	-0.10
Survey Question 28	WACH	BACH	0.64	0.19	0.03	-1.24	-0.05
Survey Question 29	MACH	FACH	0.82	0.24	0.02	-1.57	-0.08
Survey Question 29	MACH	BACH	0.76	0.23	0.03	-1.49	-0.04
Survey Question 29	WACH	FACH	0.66	0.20	0.04	-1.31	-0.01
Survey Question 30	MACH	BACH	1.21	0.24	0.00	0.48	1.93
Survey Question 30	MACH	FACH	0.99	0.24	0.00	0.27	1.70
Survey Question 30	MACH	EAMC	0.93	0.23	0.00	0.25	1.61
Survey Question 30	MACH	LACH	0.72	0.25	0.05	0.01	1.44
Survey Question 31	MACH	EAMC	1.64	0.27	0.00	-2.26	-1.02
Survey Question 31	MACH	LACH	1.60	0.29	0.00	-2.38	-0.83
Survey Question 31	MACH	BACH	2.04	0.28	0.00	-2.75	-1.33
Survey Question 31	MACH	FACH	1.82	0.28	0.00	-2.49	-1.14
Survey Question 31	MACH	BMACH	1.28	0.30	0.00	-2.00	-0.56
Survey Question 31	WACH	BACH	1.27	0.24	0.00	-2.05	-0.50
Survey Question 31	WACH	FACH	1.05	0.24	0.00	-1.78	-0.31
Survey Question 31	WACH	EAMC	0.87	0.23	0.00	-1.56	-0.17
Survey Question 31	MACH	WACH	0.77	0.28	0.01	0.12	1.42
Survey Question 31	SERMC Staff	BACH	1.61	0.40	0.01	0.24	2.98
Survey Question 31	SERMC Staff	FACH	1.38	0.40	0.04	0.03	2.74
Survey Question 31	WACH	LACH	0.84	0.25	0.05	-1.67	0.00

# Appendix G - By Question Results for the Demographic Category Rank

Figure 2 - Mean Response Scores by Rank

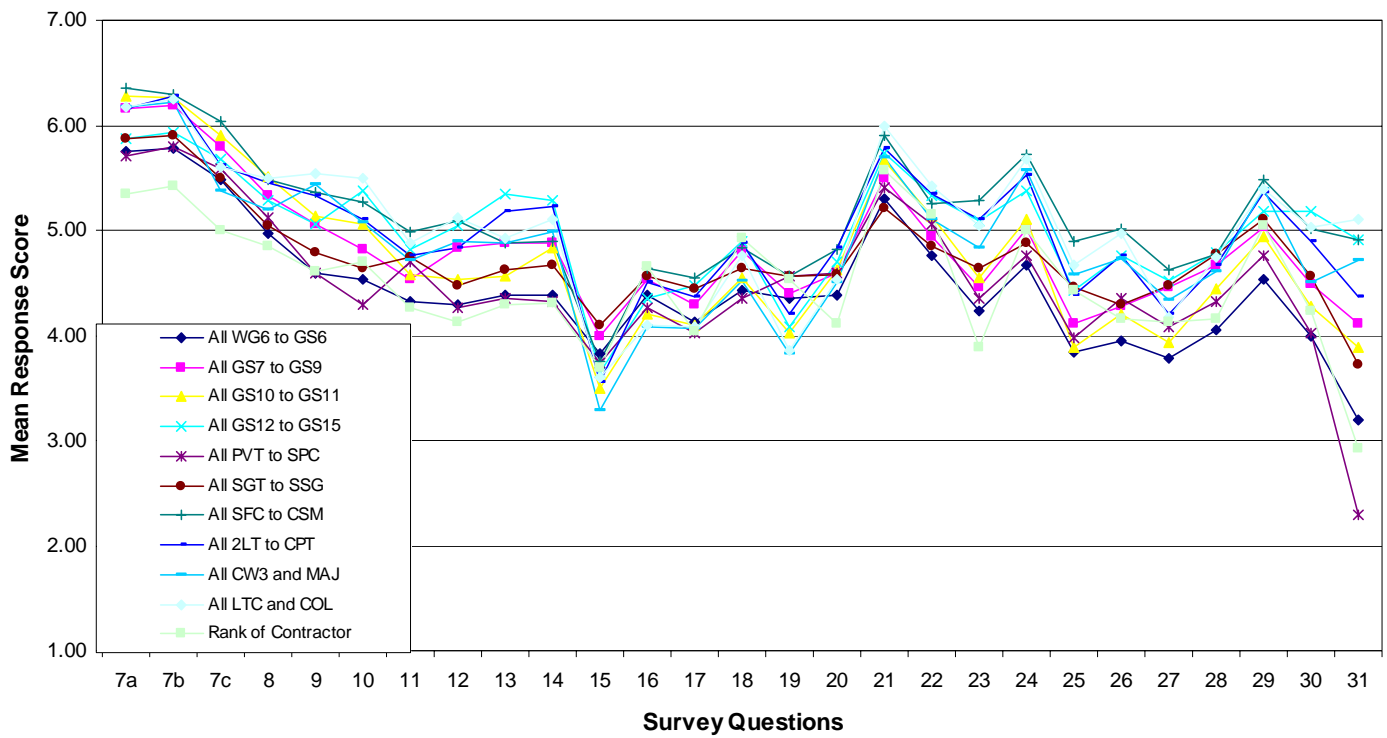


Table G1 - Survey Question and Factor Mean Response Scores by Rank Group

	Rank	Number of Responses	AVG Years in Org	SFO Principle One Survey Questions						Overall for Principle One	
				7a	7b	7c	8	9	10	Mean	SD
1	WG6 - GS6	137	7.75	5.75	5.79	5.48	4.97	4.60	4.53	5.19	1.28
2	GS7 - GS9	84	11.18	6.15	6.19	5.80	5.33	5.06	4.82	5.56	1.11
3	GS10 - GS11	105	10.70	6.28	6.27	5.90	5.50	5.14	5.06	5.69	1.03
4	GS12 - GS15	46	9.72	5.87	5.93	5.67	5.28	5.07	5.37	5.53	1.37
5	PVT - SPC	34	1.40	5.71	5.79	5.59	5.12	4.59	4.29	5.18	0.85
6	SGT - SSG	48	2.03	5.88	5.90	5.50	5.04	4.79	4.65	5.29	1.00
7	SFC - CSM	48	1.73	6.35	6.29	6.04	5.48	5.35	5.27	5.80	1.12
8	2LT - CPT	71	1.65	6.15	6.28	5.62	5.45	5.32	5.11	5.66	1.01
9	CW3 - MAJ	72	1.66	6.17	6.22	5.38	5.19	5.43	5.07	5.58	0.97
10	LTC - COL	78	2.67	6.18	6.24	5.60	5.50	5.54	5.50	5.76	0.88
11	CON	26	7.90	5.35	5.42	5.00	4.85	4.62	4.69	4.99	1.48

	Rank	Number of Responses	AVG Years in Org	SFO Principle Two Survey Questions					Overall for Principle Two	
				11	12	13	14	15	Mean	SD
1	WG6 - GS6	137	7.75	4.33	4.30	4.39	4.38	3.82	4.24	1.23
2	GS7 - GS9	84	11.18	4.54	4.84	4.88	4.88	3.99	4.63	1.22
3	GS10 - GS11	105	10.70	4.58	4.53	4.56	4.83	3.50	4.40	1.38
4	GS12 - GS15	46	9.72	4.83	5.04	5.35	5.28	3.65	4.83	1.25
5	PVT - SPC	34	1.40	4.71	4.26	4.35	4.32	3.74	4.28	0.83
6	SGT - SSG	48	2.03	4.75	4.48	4.63	4.67	4.10	4.53	1.01
7	SFC - CSM	48	1.73	4.98	5.08	4.88	4.90	3.75	4.72	1.11
8	2LT - CPT	71	1.65	4.76	4.83	5.18	5.23	3.56	4.71	1.11
9	CW3 - MAJ	72	1.66	4.71	4.89	4.88	4.99	3.29	4.55	1.11
10	LTC - COL	78	2.67	4.88	5.12	4.92	5.10	3.60	4.73	1.38
11	CON	26	7.90	4.27	4.13	4.29	4.31	3.69	4.14	1.20

Rank		Number of Responses	AVG Years in Org	SFO Principle Three Survey Questions					Overall for Principle Three	
				16	17	18	19	20	Mean	SD
1	WG6 - GS6	137	7.75	4.39	4.13	4.44	4.35	4.38	4.34	1.29
2	GS7 - GS9	84	11.18	4.54	4.30	4.81	4.40	4.60	4.53	1.20
3	GS10 - GS11	105	10.70	4.21	4.10	4.54	4.02	4.63	4.30	1.21
4	GS12 - GS15	46	9.72	4.35	4.48	4.89	4.09	4.70	4.50	1.20
5	PVT - SPC	34	1.40	4.26	4.03	4.35	4.56	4.59	4.36	0.91
6	SGT - SSG	48	2.03	4.56	4.44	4.65	4.56	4.58	4.56	1.00
7	SFC - CSM	48	1.73	4.65	4.54	4.83	4.56	4.81	4.68	1.16
8	2LT - CPT	71	1.65	4.51	4.37	4.87	4.20	4.83	4.55	1.04
9	CW3 - MAJ	72	1.66	4.08	4.07	4.51	3.83	4.50	4.20	1.15
10	LTC - COL	78	2.67	4.10	4.08	4.76	3.86	4.54	4.27	1.20
11	CON	26	7.90	4.65	4.04	4.92	4.54	4.12	4.45	1.31

Rank	Number of Responses	AVG Years in Org	SFO Principle Four Survey Questions					Overall for Principle Four		
			21	22	23	24	25	Mean	SD	
1	WG6 - GS6	137	7.75	5.30	4.75	4.23	4.67	3.84	4.56	1.41
2	GS7 - GS9	84	11.18	5.50	4.94	4.45	5.01	4.11	4.80	1.29
3	GS10 - GS11	105	10.70	5.67	5.13	4.55	5.10	3.89	4.87	1.22
4	GS12 - GS15	46	9.72	5.74	5.33	5.09	5.37	4.43	5.19	1.24
5	PVT - SPC	34	1.40	5.41	5.06	4.35	4.76	3.97	4.71	0.97
6	SGT - SSG	48	2.03	5.21	4.85	4.65	4.88	4.46	4.81	1.07
7	SFC - CSM	48	1.73	5.90	5.25	5.29	5.73	4.90	5.41	1.10
8	2LT - CPT	71	1.65	5.77	5.35	5.10	5.52	4.38	5.23	1.07
9	CW3 - MAJ	72	1.66	5.69	5.11	4.83	5.57	4.58	5.16	1.00
10	LTC - COL	78	2.67	6.00	5.42	5.05	5.68	4.67	5.36	1.11
11	CON	26	7.90	5.58	5.15	3.88	5.00	4.42	4.81	1.35

Rank	Number of Responses	AVG Years in Org	SFO Principle Five Survey Questions					Overall for Principle Five		
			26	27	28	29	30	Mean	SD	
1	WG6 - GS6	137	7.75	3.95	3.78	4.05	4.53	3.99	4.06	1.41
2	GS7 - GS9	84	11.18	4.29	4.45	4.67	5.02	4.49	4.58	1.25
3	GS10 - GS11	105	10.70	4.20	3.93	4.45	4.93	4.28	4.36	1.37
4	GS12 - GS15	46	9.72	4.76	4.52	4.78	5.17	5.17	4.88	1.28
5	PVT - SPC	34	1.40	4.35	4.09	4.32	4.76	4.03	4.31	1.06
6	SGT - SSG	48	2.03	4.29	4.48	4.77	5.10	4.56	4.64	1.13
7	SFC - CSM	48	1.73	5.02	4.63	4.77	5.48	5.02	4.98	1.11
8	2LT - CPT	71	1.65	4.76	4.20	4.66	5.37	4.89	4.77	1.16
9	CW3 - MAJ	72	1.66	4.74	4.33	4.61	5.39	4.50	4.71	1.03
10	LTC - COL	78	2.67	4.97	4.18	4.74	5.40	5.03	4.86	1.28
11	CON	26	7.90	4.15	4.12	4.15	5.04	4.23	4.34	1.41

Table G2 - Analysis of Variance and F Ratios for the Demographic Category Rank

<i>Source</i>		<i>Sum of Squares</i>	<i>Mean Square</i>	<i>F</i>
Survey Question 7a	Between Groups	45.58	4.56	3.36**
	Within Groups	1000.71	1.36	
	Total	1046.29		
Survey Question 7b	Between Groups	41.47	4.15	3.08**
	Within Groups	992.63	1.35	
	Total	1034.11		
Survey Question 7c	Between Groups	37.46	3.75	1.98*
	Within Groups	1399.36	1.90	
	Total	1436.82		
Survey Question 8	Between Groups	35.31	3.53	1.59
	Within Groups	1629.29	2.21	
	Total	1664.60		
Survey Question 9	Between Groups	82.96	8.30	3.60**
	Within Groups	1699.09	2.30	
	Total	1782.05		
Survey Question 10	Between Groups	86.70	8.67	4.01**
	Within Groups	1595.16	2.16	
	Total	1681.86		
Survey Question 11	Between Groups	31.84	3.18	1.33
	Within Groups	1769.25	2.40	
	Total	1801.09		
Survey Question 12	Between Groups	74.24	7.42	3.31**
	Within Groups	1654.17	2.24	
	Total	1728.40		
Survey Question 13	Between Groups	68.93	6.89	3.90**
	Within Groups	1302.68	1.77	
	Total	1371.61		
Survey Question 14	Between Groups	73.21	7.32	4.23**
	Within Groups	1278.00	1.73	
	Total	1351.20		
Survey Question 15	Between Groups	35.88	3.59	1.59
	Within Groups	1655.78	2.24	
	Total	1691.66		
Survey Question 16	Between Groups	25.74	2.57	1.28
	Within Groups	1482.93	2.01	
	Total	1508.67		
Survey Question 17	Between Groups	20.34	2.03	1.30
	Within Groups	1154.05	1.56	
	Total	1174.39		

Survey Question 18	Between Groups	24.62	2.46	1.06
	Within Groups	1708.39	2.31	
	Total	1733.01		
Survey Question 19	Between Groups	49.08	4.91	2.12*
	Within Groups	1710.09	2.32	
	Total	1759.16		
Survey Question 20	Between Groups	19.38	1.94	0.99
	Within Groups	1443.87	1.96	
	Total	1463.24		
Survey Question 21	Between Groups	42.89	4.29	2.30*
	Within Groups	1378.18	1.87	
	Total	1421.07		
Survey Question 22	Between Groups	37.85	3.78	1.73
	Within Groups	1617.15	2.19	
	Total	1655.00		
Survey Question 23	Between Groups	104.22	10.42	3.64**
	Within Groups	2115.78	2.87	
	Total	2220.00		
Survey Question 24	Between Groups	104.14	10.41	4.69**
	Within Groups	1637.13	2.22	
	Total	1741.27		
Survey Question 25	Between Groups	88.37	8.84	3.02**
	Within Groups	2159.86	2.93	
	Total	2248.23		
Survey Question 26	Between Groups	100.86	10.09	4.03**
	Within Groups	1848.11	2.50	
	Total	1948.97		
Survey Question 27	Between Groups	56.35	5.63	2.31*
	Within Groups	1800.26	2.44	
	Total	1856.60		
Survey Question 28	Between Groups	51.91	5.19	2.38*
	Within Groups	1606.96	2.18	
	Total	1658.87		
Survey Question 29	Between Groups	75.23	7.52	3.28**
	Within Groups	1693.06	2.29	
	Total	1768.29		
Survey Question 30	Between Groups	116.61	11.66	4.80**
	Within Groups	1792.26	2.43	
	Total	1908.87		
Survey Question 31	Between Groups	440.79	44.08	13.98**
	Within Groups	2327.28	3.15	
	Total	2768.06		

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$df = 10, 738$

\*  $p < .05$

\*\*  $p < .001$

Table G3 - Significant Differences in Rank Group Mean Response Scores

Dependent Variable	Rank Group 1	Rank Group 2	Mean Difference (1-2)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Survey Question 7a	GS10 - GS11	WG6 - GS6	0.52	0.15	0.04	-1.03	-0.02
Survey Question 9	LTC - COL	WG6 - GS6	0.94	0.22	0.00	-1.59	-0.29
	CW3 - MAJ	WG6 - GS6	0.83	0.22	0.00	-1.51	-0.16
	LTC - COL	PVT - SPC	0.95	0.31	0.05	-1.90	0.00
Survey Question 10	LTC - COL	WG6 - GS6	0.97	0.21	0.00	-1.59	-0.34
	LTC - COL	PVT - SPC	1.21	0.30	0.00	-2.04	-0.37
	GS12 - GS15	PVT - SPC	1.08	0.33	0.02	0.09	2.06
	LTC - COL	SGT - SSG	0.85	0.27	0.03	-1.67	-0.03
	GS12 - GS15	WG6 - GS6	0.84	0.25	0.04	-1.66	-0.01
Survey Question 12	LTC - COL	WG6 - GS6	0.83	0.21	0.00	-1.50	-0.15
	LTC - COL	PVT - SPC	0.86	0.31	0.02	-1.65	-0.07
Survey Question 13	GS12 - GS15	WG6 - GS6	0.96	0.23	0.00	-1.66	-0.26
	2LT - CPT	WG6 - GS6	0.80	0.19	0.00	-1.39	-0.20
	GS12 - GS15	PVT - SPC	0.99	0.30	0.02	0.09	1.90
	GS12 - GS15	CON	1.06	0.33	0.04	0.04	2.08
	GS12 - GS15	GS10 - GS11	0.79	0.23	0.04	-1.55	-0.02
Survey Question 14	2LT - CPT	WG6 - GS6	0.85	0.19	0.00	-1.41	-0.28
	GS12 - GS15	WG6 - GS6	0.90	0.22	0.00	-1.60	-0.21
	2LT - CPT	PVT - SPC	0.90	0.27	0.00	-1.60	-0.21
	GS12 - GS15	PVT - SPC	0.96	0.30	0.01	0.16	1.76
	LTC - COL	WG6 - GS6	0.72	0.19	0.03	-1.41	-0.04
Survey Question 15	SGT - SSG	CW3 - MAJ	0.82	0.28	0.03	0.04	1.60
Survey Question 21	LTC - COL	WG6 - GS6	0.70	0.19	0.01	-1.33	-0.08
	LTC - COL	SGT - SSG	0.79	0.25	0.04	-1.57	-0.02
Survey Question 23	SFC - CSM	WG6 - GS6	1.06	0.28	0.01	-1.96	-0.16
	2LT - CPT	WG6 - GS6	0.87	0.25	0.02	-1.65	-0.09
	LTC - COL	WG6 - GS6	0.82	0.24	0.02	-1.58	-0.06
	SFC - CSM	CON	1.41	0.41	0.05	0.00	2.81
Survey Question 24	LTC - COL	WG6 - GS6	1.01	0.21	0.00	-1.67	-0.35
	CW3 - MAJ	WG6 - GS6	0.90	0.22	0.00	-1.55	-0.24
	SFC - CSM	WG6 - GS6	1.06	0.25	0.00	-1.84	-0.27
	2LT - CPT	WG6 - GS6	0.85	0.22	0.01	-1.57	-0.13
Survey Question 25	SFC - CSM	WG6 - GS6	1.05	0.29	0.01	-1.97	-0.14
	SFC - CSM	GS10 - GS11	1.01	0.30	0.04	-1.99	-0.03
	LTC - COL	WG6 - GS6	0.83	0.24	0.05	-1.64	-0.01
Survey Question 26	SFC - CSM	WG6 - GS6	1.07	0.27	0.00	-1.85	-0.29
	LTC - COL	WG6 - GS6	1.02	0.22	0.00	-1.78	-0.26
	CW3 - MAJ	WG6 - GS6	0.78	0.23	0.02	-1.50	-0.07
	2LT - CPT	WG6 - GS6	0.81	0.23	0.03	-1.58	-0.04
	SFC - CSM	GS10 - GS11	0.82	0.28	0.05	-1.64	0.00

Dependent Variable	Rank Group 1	Rank Group 2	Mean Difference (1-2)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Survey Question 29	CW3 - MAJ	WG6 - GS6	0.86	0.22	0.00	-1.482	-0.229
	LTC - COL	WG6 - GS6	0.86	0.21	0.00	-1.563	-0.165
	SFC - CSM	WG6 - GS6	0.95	0.25	0.01	-1.74	-0.15
	2LT - CPT	WG6 - GS6	0.83	0.22	0.01	-1.54	-0.12
Survey Question 30	LTC - COL	WG6 - GS6	1.04	0.22	0.00	-1.75	-0.32
	GS12 - GS15	WG6 - GS6	1.18	0.27	0.00	-2.03	-0.34
	2LT - CPT	WG6 - GS6	0.90	0.23	0.00	-1.62	-0.17
	SFC - CSM	WG6 - GS6	1.03	0.26	0.01	-1.89	-0.17
	GS12 - GS15	PVT - SPC	1.14	0.35	0.03	0.07	2.21
	LTC - COL	PVT - SPC	1.00	0.32	0.04	-1.97	-0.02
	GS12 - GS15	GS10 - GS11	0.90	0.28	0.04	-1.78	-0.01
Survey Question 31	CW3 - MAJ	PVT - SPC	2.41	0.37	0.00	-3.45	-1.38
	LTC - COL	PVT - SPC	2.81	0.36	0.00	-3.81	-1.81
	GS12 - GS15	PVT - SPC	2.62	0.40	0.00	1.49	3.75
	LTC - COL	WG6 - GS6	1.91	0.25	0.00	-2.72	-1.09
	2LT - CPT	PVT - SPC	2.07	0.37	0.00	-3.08	-1.06
	SFC - CSM	WG6 - GS6	1.72	0.30	0.00	-2.54	-0.90
	SFC - CSM	PVT - SPC	2.62	0.40	0.00	-3.63	-1.62
	CW3 - MAJ	WG6 - GS6	1.51	0.26	0.00	-2.36	-0.66
	PVT - SPC	GS7 - GS9	1.82	0.36	0.00	0.81	2.84
	GS12 - GS15	WG6 - GS6	1.72	0.30	0.00	-2.69	-0.74
	GS10 - GS11	PVT - SPC	1.59	0.35	0.00	0.58	2.60
	2LT - CPT	WG6 - GS6	1.17	0.26	0.00	-1.99	-0.35
	LTC - COL	CON	2.18	0.40	0.00	0.73	3.63
	LTC - COL	GS10 - GS11	1.22	0.27	0.00	-2.13	-0.30
	SFC - CSM	CON	1.99	0.43	0.00	0.54	3.44
	LTC - COL	SGT - SSG	1.37	0.33	0.00	-2.41	-0.33
	SGT - SSG	PVT - SPC	1.44	0.40	0.00	-2.55	-0.32
	GS12 - GS15	CON	1.99	0.44	0.00	0.46	3.52
	CW3 - MAJ	CON	1.79	0.41	0.01	0.32	3.25
	SFC - CSM	SGT - SSG	1.19	0.36	0.01	-2.23	-0.14
	SFC - CSM	GS10 - GS11	1.03	0.31	0.02	-1.95	-0.11
	GS7 - GS9	WG6 - GS6	0.92	0.25	0.02	-1.75	-0.09
	LTC - COL	GS7 - GS9	0.98	0.28	0.03	-1.91	-0.06
	GS12 - GS15	SGT - SSG	1.18	0.37	0.04	0.02	2.35

Appendix H - By Question Results for the Demographic Category  
Duty Status

**Figure 3 - Mean Response Scores by Duty Status**

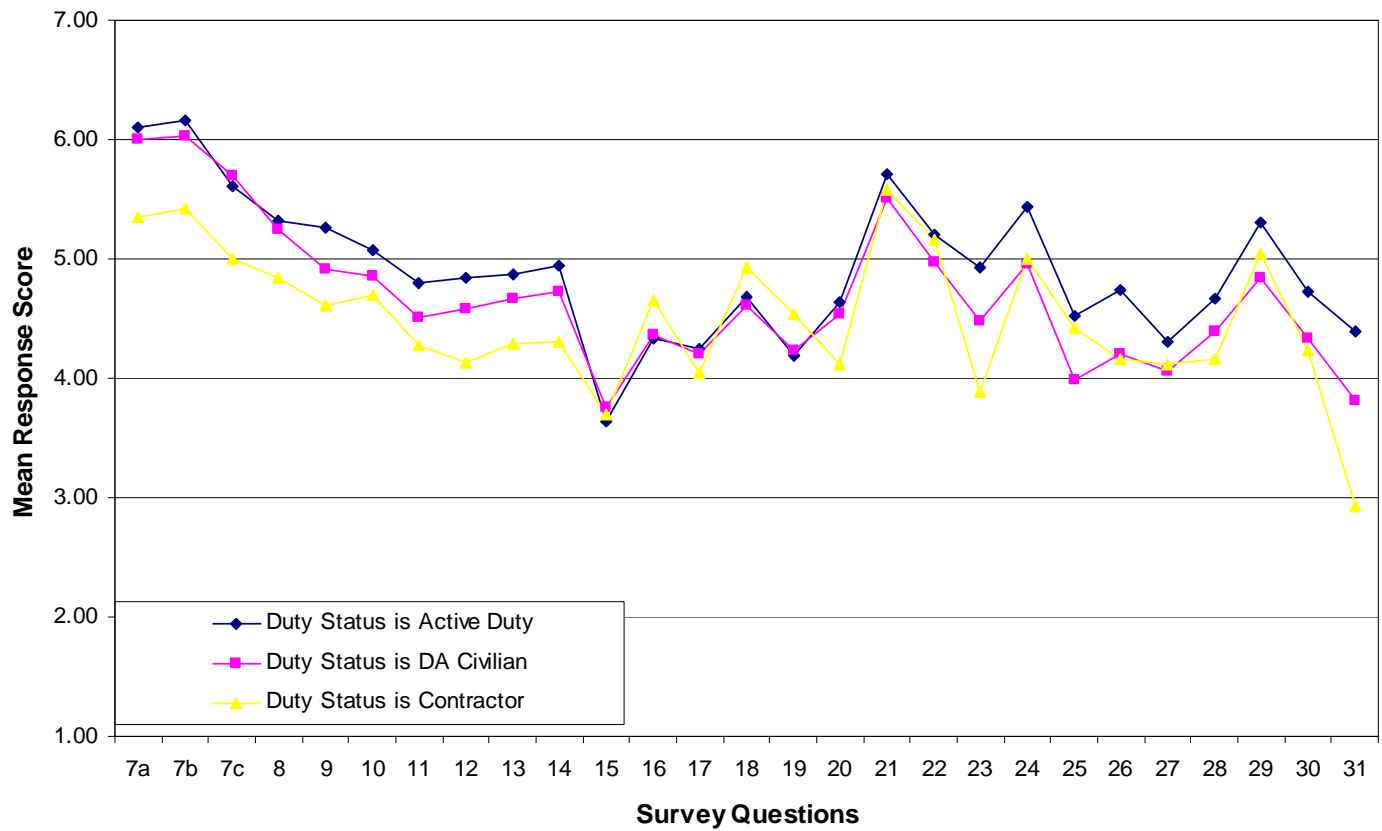


Table H1 - Survey Question and Factor Mean Response Scores by Duty Status

Duty Status		Number of Responses	AVG Years in Org	SFO Principle One Survey Questions						Overall for Principle One	
				7a	7b	7c	8	9	10	Mean	SD
1	Active Duty	351	1.92	6.11	6.16	5.60	5.32	5.25	5.07	5.59	0.99
2	DA Civilian	372	9.58	6.01	6.03	5.70	5.24	4.91	4.85	5.46	1.20
3	Contractor	26	7.90	5.35	5.42	5.00	4.85	4.62	4.69	4.99	1.48
Duty Status		Number of Responses	AVG Years in Org	SFO Principle Two Survey Questions					Overall for Principle Two		
				11	12	13	14	15	Mean	SD	
1	Active Duty	351	1.92	4.80	4.84	4.86	4.94	3.63		4.61	1.14
2	DA Civilian	372	9.58	4.51	4.58	4.67	4.73	3.75		4.45	1.29
3	Contractor	26	7.90	4.27	4.13	4.29	4.31	3.69		4.14	1.20
Duty Status		Number of Responses	AVG Years in Org	SFO Principle Three Survey Questions					Overall for Principle Three		
				16	17	18	19	20	Mean	SD	
1	Active Duty	351	1.92	4.33	4.24	4.69	4.18	4.64		4.42	1.11
2	DA Civilian	372	9.58	4.37	4.20	4.61	4.24	4.54		4.39	1.24
3	Contractor	26	7.90	4.65	4.04	4.92	4.54	4.12		4.45	1.31
Duty Status		Number of Responses	AVG Years in Org	SFO Principle Four Survey Questions					Overall for Principle Four		
				21	22	23	24	25	Mean	SD	
1	Active Duty	351	1.92	5.71	5.21	4.93	5.43	4.53		5.16	1.08
2	DA Civilian	372	9.58	5.50	4.97	4.48	4.96	3.99		4.78	1.32
3	Contractor	26	7.90	5.58	5.15	3.88	5.00	4.42		4.81	1.35
Duty Status		Number of Responses	AVG Years in Org	SFO Principle Five Survey Questions					Overall for Principle Five		
				26	27	28	29	30	Mean	SD	
1	Active Duty	351	1.92	4.74	4.31	4.67	5.30	4.73		4.75	1.15
2	DA Civilian	372	9.58	4.20	4.07	4.39	4.84	4.33		4.36	1.37
3	Contractor	26	7.90	4.15	4.12	4.15	5.04	4.23		4.34	1.41

Table H2 - Analysis of Variance and F Ratios for the Demographic Category Duty Status

	<i>Source</i>	<i>Sum of Squares</i>	<i>Mean Square</i>	<i>F</i>
Survey Question 7a	Between Groups	14.53	7.27	5.25*
	Within Groups	1031.76	1.38	
	Total	1046.29		
Survey Question 7b	Between Groups	14.40	7.20	5.27*
	Within Groups	1019.70	1.37	
	Total	1034.11		
Survey Question 7c	Between Groups	12.19	6.09	3.19*
	Within Groups	1424.63	1.91	
	Total	1436.82		
Survey Question 8	Between Groups	6.01	3.01	1.35
	Within Groups	1658.58	2.22	
	Total	1664.60		
Survey Question 9	Between Groups	26.24	13.12	5.57*
	Within Groups	1755.81	2.35	
	Total	1782.05		
Survey Question 10	Between Groups	10.38	5.19	2.32
	Within Groups	1671.48	2.24	
	Total	1681.86		
Survey Question 11	Between Groups	18.97	9.49	3.97*
	Within Groups	1782.12	2.39	
	Total	1801.09		
Survey Question 12	Between Groups	20.59	10.29	4.50*
	Within Groups	1707.82	2.29	
	Total	1728.40		
Survey Question 13	Between Groups	12.66	6.33	3.47*
	Within Groups	1358.95	1.82	
	Total	1371.61		
Survey Question 14	Between Groups	14.80	7.40	4.13*
	Within Groups	1336.40	1.79	
	Total	1351.20		
Survey Question 15	Between Groups	2.42	1.21	0.53
	Within Groups	1689.24	2.26	
	Total	1691.66		
Survey Question 16	Between Groups	2.51	1.25	0.62
	Within Groups	1506.16	2.02	
	Total	1508.67		
Survey Question 17	Between Groups	1.14	0.57	0.36
	Within Groups	1173.26	1.57	
	Total	1174.39		

Survey Question 18	Between Groups	3.09	1.55	0.67
	Within Groups	1729.92	2.32	
	Total	1733.01		
Survey Question 19	Between Groups	3.24	1.62	0.69
	Within Groups	1755.92	2.35	
	Total	1759.16		
Survey Question 20	Between Groups	7.36	3.68	1.89
	Within Groups	1455.89	1.95	
	Total	1463.24		
Survey Question 21	Between Groups	8.03	4.02	2.12
	Within Groups	1413.04	1.89	
	Total	1421.07		
Survey Question 22	Between Groups	10.05	5.03	2.28
	Within Groups	1644.95	2.21	
	Total	1655.00		
Survey Question 23	Between Groups	52.92	26.46	9.11**
	Within Groups	2167.08	2.90	
	Total	2220.00		
Survey Question 24	Between Groups	41.74	20.87	9.16**
	Within Groups	1699.54	2.28	
	Total	1741.27		
Survey Question 25	Between Groups	53.38	26.69	9.07**
	Within Groups	2194.84	2.94	
	Total	2248.23		
Survey Question 26	Between Groups	54.52	27.26	10.73**
	Within Groups	1894.44	2.54	
	Total	1948.97		
Survey Question 27	Between Groups	10.73	5.36	2.17
	Within Groups	1845.87	2.47	
	Total	1856.60		
Survey Question 28	Between Groups	16.92	8.46	3.84*
	Within Groups	1641.94	2.20	
	Total	1658.87		
Survey Question 29	Between Groups	38.72	19.36	8.35**
	Within Groups	1729.57	2.32	
	Total	1768.29		
Survey Question 30	Between Groups	31.05	15.52	6.17*
	Within Groups	1877.82	2.52	
	Total	1908.87		
Survey Question 31	Between Groups	94.08	47.04	13.12**
	Within Groups	2673.99	3.58	
	Total	2768.06		

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$df = 2, 746$

\*  $p < .05$

\*\*  $p < .001$

Table H3 - Significant Differences in Duty Status Group Mean Response Scores

Dependent Variable	Duty Status 1	Duty Status 2	Mean Difference (1-2)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Survey Question 9	Active Duty Military	DA Civilian	0.34	0.11	0.01	0.07	0.61
Survey Question 11	Active Duty Military	DA Civilian	0.29	0.12	0.03	0.02	0.56
Survey Question 12	Active Duty Military	Contractor	0.71	0.31	0.04	0.04	1.38
Survey Question 23	Active Duty Military	DA Civilian	0.45	0.13	0.00	0.15	0.74
	Active Duty Military	Contractor	1.04	0.35	0.02	0.15	1.94
Survey Question 24	Active Duty Military	DA Civilian	0.48	0.11	0.00	0.21	0.74
Survey Question 25	Active Duty Military	DA Civilian	0.54	0.13	0.00	0.24	0.84
Survey Question 26	Active Duty Military	DA Civilian	0.54	0.12	0.00	0.26	0.82
Survey Question 28	Active Duty Military	DA Civilian	0.27	0.11	0.04	0.01	0.53
Survey Question 29	Active Duty Military	DA Civilian	0.46	0.11	0.00	0.20	0.73
Survey Question 30	Active Duty Military	DA Civilian	0.40	0.12	0.00	0.12	0.68
Survey Question 31	Active Duty Military	DA Civilian	0.58	0.14	0.00	0.25	0.91
	Active Duty Military	Contractor	1.46	0.38	0.00	0.50	2.42

Appendix I - By Question Results for the Demographic Category  
Professional Discipline

Figure 4 - Mean Response Scores by Professional Discipline

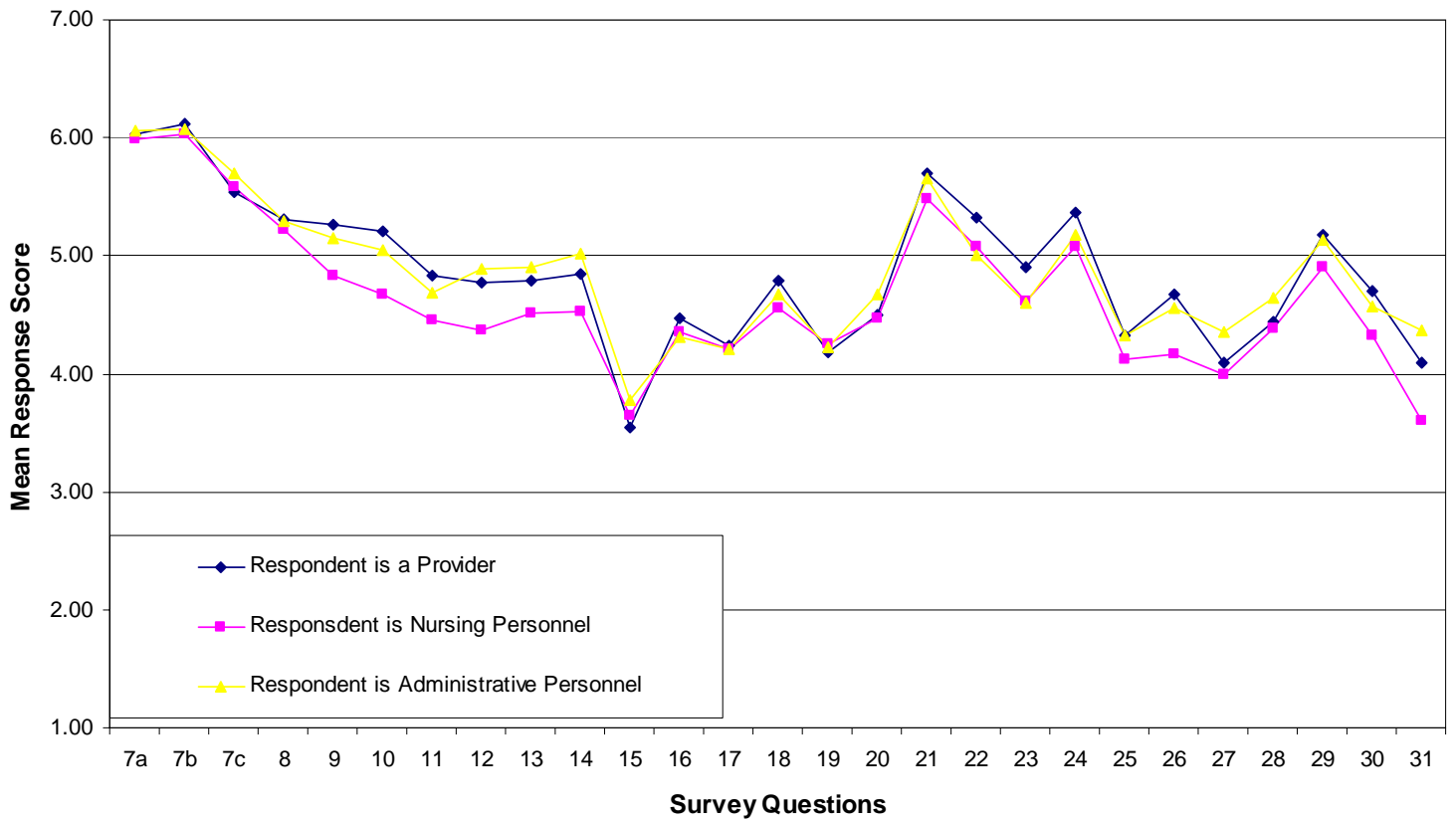


Table I1 - Survey Question and Factor Mean Response Scores by Professional Discipline

Professional Discipline	Number of Responses	AVG Years in Org	SFO Principle One Survey Questions						Overall for Principle One	
			7a	7b	7c	8	9	10	Mean	SD
1 Provider	145	3.75	6.03	6.12	5.54	5.30	5.27	5.21	5.58	1.05
2 Nursing	260	5.75	5.99	6.04	5.58	5.22	4.83	4.67	5.39	1.17
3 Administrator	344	7.00	6.06	6.08	5.70	5.29	5.15	5.05	5.55	1.11

Professional Discipline	Number of Responses	AVG Years in Org	SFO Principle Two Survey Questions					Overall for Principle Two	
			11	12	13	14	15	Mean	SD
1 Provider	145	3.75	4.83	4.77	4.79	4.84	3.55	4.56	1.26
2 Nursing	260	5.75	4.46	4.38	4.51	4.53	3.65	4.31	1.20
3 Administrator	344	7.00	4.69	4.88	4.90	5.01	3.78	4.65	1.20

Professional Discipline	Number of Responses	AVG Years in Org	SFO Principle Three Survey Questions					Overall for Principle Three	
			16	17	18	19	20	Mean	SD
1 Provider	145	3.75	4.48	4.23	4.79	4.19	4.50	4.44	1.12
2 Nursing	260	5.75	4.36	4.21	4.56	4.25	4.47	4.37	1.18
3 Administrator	344	7.00	4.31	4.21	4.67	4.22	4.67	4.42	1.20

Professional Discipline	Number of Responses	AVG Years in Org	SFO Principle Four Survey Questions					Overall for Principle Four	
			21	22	23	24	25	Mean	SD
1 Provider	145	3.75	5.70	5.32	4.90	5.37	4.32	5.12	1.23
2 Nursing	260	5.75	5.49	5.08	4.62	5.08	4.13	4.88	1.21
3 Administrator	344	7.00	5.65	5.00	4.60	5.18	4.32	4.95	1.24

Professional Discipline	Number of Responses	AVG Years in Org	SFO Principle Five Survey Questions					Overall for Principle Five	
			26	27	28	29	30	Mean	SD
1 Provider	145	3.75	4.68	4.10	4.44	5.18	4.70	4.62	1.26
2 Nursing	260	5.75	4.17	3.99	4.38	4.90	4.33	4.36	1.30
3 Administrator	344	7.00	4.56	4.36	4.64	5.13	4.57	4.65	1.27

Table I2 - Analysis of Variance and F Ratios for the Demographic Category Professional Discipline

	<i>Source</i>	<i>Sum of Squares</i>	<i>Mean Square</i>	<i>F</i>
Survey Question 7a	Between Groups	0.78	0.39	0.27
	Within Groups	1045.51	1.40	
	Total	1046.29		
Survey Question 7b	Between Groups	0.69	0.35	0.25
	Within Groups	1033.42	1.39	
	Total	1034.11		
Survey Question 7c	Between Groups	3.72	1.86	0.97
	Within Groups	1433.10	1.92	
	Total	1436.82		
Survey Question 8	Between Groups	0.93	0.47	0.21
	Within Groups	1663.66	2.23	
	Total	1664.60		
Survey Question 9	Between Groups	22.82	11.41	4.84*
	Within Groups	1759.23	2.36	
	Total	1782.05		
Survey Question 10	Between Groups	34.38	17.19	7.78**
	Within Groups	1647.48	2.21	
	Total	1681.86		
Survey Question 11	Between Groups	15.07	7.54	3.15*
	Within Groups	1786.02	2.39	
	Total	1801.09		
Survey Question 12	Between Groups	39.60	19.80	8.75**
	Within Groups	1688.80	2.26	
	Total	1728.40		
Survey Question 13	Between Groups	23.28	11.64	6.44*
	Within Groups	1348.33	1.81	
	Total	1371.61		
Survey Question 14	Between Groups	34.24	17.12	9.70**
	Within Groups	1316.97	1.77	
	Total	1351.20		
Survey Question 15	Between Groups	5.86	2.93	1.30
	Within Groups	1685.80	2.26	
	Total	1691.66		
Survey Question 16	Between Groups	2.68	1.34	0.66
	Within Groups	1505.99	2.02	
	Total	1508.67		
Survey Question 17	Between Groups	0.07	0.03	0.02
	Within Groups	1174.32	1.57	
	Total	1174.39		

Survey Question 18	Between Groups	4.85	2.43	1.05
	Within Groups	1728.16	2.32	
	Total	1733.01		
Survey Question 19	Between Groups	0.34	0.17	0.07
	Within Groups	1758.82	2.36	
	Total	1759.16		
Survey Question 20	Between Groups	6.75	3.37	1.73
	Within Groups	1456.50	1.95	
	Total	1463.24		
Survey Question 21	Between Groups	5.44	2.72	1.43
	Within Groups	1415.63	1.90	
	Total	1421.07		
Survey Question 22	Between Groups	10.13	5.06	2.30
	Within Groups	1644.87	2.20	
	Total	1655.00		
Survey Question 23	Between Groups	10.11	5.06	1.71
	Within Groups	2209.89	2.96	
	Total	2220.00		
Survey Question 24	Between Groups	7.55	3.77	1.62
	Within Groups	1733.72	2.32	
	Total	1741.27		
Survey Question 25	Between Groups	6.57	3.28	1.09
	Within Groups	2241.66	3.00	
	Total	2248.23		
Survey Question 26	Between Groups	32.23	16.12	6.27*
	Within Groups	1916.73	2.57	
	Total	1948.97		
Survey Question 27	Between Groups	21.05	10.52	4.28*
	Within Groups	1835.55	2.46	
	Total	1856.60		
Survey Question 28	Between Groups	10.67	5.33	2.41
	Within Groups	1648.20	2.21	
	Total	1658.87		
Survey Question 29	Between Groups	10.45	5.23	2.22
	Within Groups	1757.84	2.36	
	Total	1768.29		
Survey Question 30	Between Groups	15.06	7.53	2.97
	Within Groups	1893.81	2.54	
	Total	1908.87		
Survey Question 31	Between Groups	86.24	43.12	11.99**
	Within Groups	2681.83	3.59	
	Total	2768.06		

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$df = 2, 746$

\*  $p < .05$

\*\*  $p < .001$

Table I3 - Significant Differences in Professional Discipline Group Mean Response Scores

Dependent Variable	Professional Discipline 1	Professional Discipline 2	Mean Difference (1-2)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Survey Question 9	Providers	Nursing	0.44	0.16	0.02	-0.82	-0.06
	Administrative	Nursing	0.32	0.13	0.04	0.02	0.62
Survey Question 10	Providers	Nursing	0.55	0.15	0.00	-0.92	-0.18
	Administrative	Nursing	0.38	0.12	0.01	0.09	0.67
Survey Question 11	Providers	Nursing	0.38	0.16	0.05	-0.76	0.00
Survey Question 12	Administrative	Nursing	0.51	0.12	0.00	0.22	0.80
	Providers	Nursing	0.39	0.16	0.04	-0.77	-0.02
Survey Question 13	Administrative	Nursing	0.39	0.11	0.00	0.14	0.65
Survey Question 14	Administrative	Nursing	0.48	0.11	0.00	0.23	0.73
Survey Question 26	Providers	Nursing	0.51	0.17	0.01	-0.89	-0.12
	Administrative	Nursing	0.39	0.13	0.01	0.08	0.71
Survey Question 27	Administrative	Nursing	0.37	0.13	0.01	0.07	0.66
Survey Question 31	Administrative	Nursing	0.76	0.16	0.00	0.40	1.13
	Providers	Nursing	0.48	0.20	0.04	-0.94	-0.02

Appendix J - By Question Results for the Demographic Category  
Organizational Level

Figure 5 - Mean Response Scores by Organizational Level

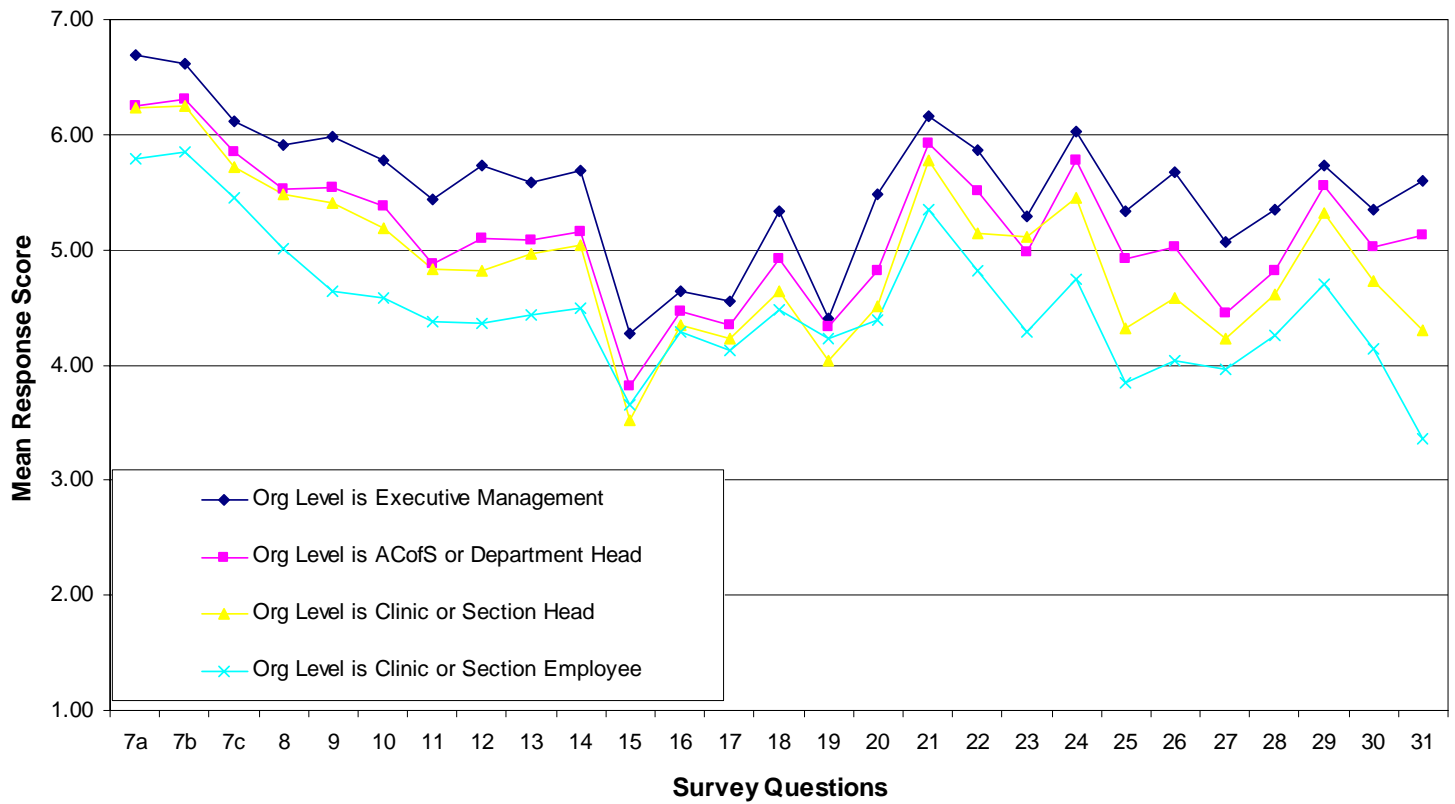


Table I1 - Survey Question and Factor Mean Response Scores by Professional Discipline

Organizational Level		Number of Responses	AVG Years in Org	SFO Principle One Survey Questions						Overall for Principle One	
				7a	7b	7c	8	9	10	Mean	SD
1	Executive Managemen	45	3.16	6.69	6.62	6.11	5.91	5.98	5.78	6.18	0.73
2	ACofS / Department Head	153	4.22	6.25	6.30	5.84	5.53	5.54	5.38	5.81	0.91
3	Clinic / Section Head	157	5.31	6.23	6.25	5.71	5.48	5.40	5.19	5.71	1.01
4	Clinic / Section Employee	394	7.17	5.79	5.85	5.46	5.01	4.64	4.59	5.22	1.20
Organizational Level		Number of Responses	AVG Years in Org	SFO Principle Two Survey Questions					Overall for Principle Two		
				11	12	13	14	15	Mean	SD	
1	Executive Managemen	45	3.16	5.44	5.73	5.58	5.69	4.27		5.34	1.03
2	ACofS / Department Head	153	4.22	4.88	5.09	5.09	5.16	3.81		4.80	1.11
3	Clinic / Section Head	157	5.31	4.83	4.81	4.97	5.04	3.52		4.63	1.18
4	Clinic / Section Employee	394	7.17	4.38	4.36	4.43	4.49	3.65		4.26	1.23
Organizational Level		Number of Responses	AVG Years in Org	SFO Principle Three Survey Questions					Overall for Principle Three		
				16	17	18	19	20	Mean	SD	
1	Executive Managemen	45	3.16	4.64	4.56	5.33	4.40	5.49		4.88	1.05
2	ACofS / Department Head	153	4.22	4.46	4.34	4.92	4.33	4.82		4.58	1.10
3	Clinic / Section Head	157	5.31	4.35	4.23	4.64	4.04	4.50		4.35	1.24
4	Clinic / Section Employee	394	7.17	4.29	4.12	4.48	4.23	4.39		4.30	1.18
Organizational Level		Number of Responses	AVG Years in Org	SFO Principle Four Survey Questions					Overall for Principle Four		
				21	22	23	24	25	Mean	SD	
1	Executive Managemen	45	3.16	6.16	5.87	5.29	6.02	5.33		5.73	0.94
2	ACofS / Department Head	153	4.22	5.93	5.51	4.99	5.77	4.93		5.42	1.02
3	Clinic / Section Head	157	5.31	5.77	5.15	5.11	5.46	4.31		5.16	1.12
4	Clinic / Section Employee	394	7.17	5.35	4.81	4.29	4.75	3.85		4.61	1.26
Organizational Level		Number of Responses	AVG Years in Org	SFO Principle Five Survey Questions					Overall for Principle Five		
				26	27	28	29	30	Mean	SD	
1	Executive Managemen	45	3.16	5.67	5.07	5.36	5.73	5.36		5.44	0.97
2	ACofS / Department Head	153	4.22	5.02	4.45	4.82	5.55	5.02		4.97	1.15
3	Clinic / Section Head	157	5.31	4.58	4.22	4.61	5.31	4.73		4.69	1.27
4	Clinic / Section Employee	394	7.17	4.03	3.96	4.26	4.69	4.14		4.22	1.27

Table J2 - Analysis of Variance and F Ratios for the Demographic Category Organizational Level

<i>Source</i>		<i>Sum of Squares</i>	<i>Mean Square</i>	<i>F</i>
Survey Question 7a	Between Groups	56.33	18.78	14.13**
	Within Groups	989.96	1.33	
	Total	1046.29		
Survey Question 7b	Between Groups	45.88	15.29	11.53**
	Within Groups	988.22	1.33	
	Total	1034.11		
Survey Question 7c	Between Groups	30.27	10.09	5.34*
	Within Groups	1406.55	1.89	
	Total	1436.82		
Survey Question 8	Between Groups	62.68	20.89	9.72**
	Within Groups	1601.91	2.15	
	Total	1664.60		
Survey Question 9	Between Groups	160.52	53.51	24.58**
	Within Groups	1621.53	2.18	
	Total	1782.05		
Survey Question 10	Between Groups	120.21	40.07	19.12**
	Within Groups	1561.65	2.10	
	Total	1681.86		
Survey Question 11	Between Groups	70.57	23.52	10.13**
	Within Groups	1730.52	2.32	
	Total	1801.09		
Survey Question 12	Between Groups	119.65	39.88	18.47**
	Within Groups	1608.75	2.16	
	Total	1728.40		
Survey Question 13	Between Groups	96.90	32.30	18.88**
	Within Groups	1274.71	1.71	
	Total	1371.61		
Survey Question 14	Between Groups	101.08	33.69	20.08**
	Within Groups	1250.13	1.68	
	Total	1351.20		
Survey Question 15	Between Groups	22.25	7.42	3.31*
	Within Groups	1669.41	2.24	
	Total	1691.66		
Survey Question 16	Between Groups	7.14	2.38	1.18
	Within Groups	1501.53	2.02	
	Total	1508.67		
Survey Question 17	Between Groups	11.06	3.69	2.36
	Within Groups	1163.34	1.56	
	Total	1174.39		

Survey Question 18	Between Groups	43.51	14.50	6.40**
	Within Groups	1689.50	2.27	
	Total	1733.01		
Survey Question 19	Between Groups	8.47	2.82	1.20
	Within Groups	1750.69	2.35	
	Total	1759.16		
Survey Question 20	Between Groups	60.62	20.21	10.73**
	Within Groups	1402.63	1.88	
	Total	1463.24		
Survey Question 21	Between Groups	60.21	20.07	10.99**
	Within Groups	1360.87	1.83	
	Total	1421.07		
Survey Question 22	Between Groups	84.42	28.14	13.35**
	Within Groups	1570.58	2.11	
	Total	1655.00		
Survey Question 23	Between Groups	119.72	39.91	14.15**
	Within Groups	2100.28	2.82	
	Total	2220.00		
Survey Question 24	Between Groups	171.58	57.19	27.14**
	Within Groups	1569.70	2.11	
	Total	1741.27		
Survey Question 25	Between Groups	187.31	62.44	22.57**
	Within Groups	2060.92	2.77	
	Total	2248.23		
Survey Question 26	Between Groups	187.03	62.34	26.36**
	Within Groups	1761.94	2.37	
	Total	1948.97		
Survey Question 27	Between Groups	66.36	22.12	9.21**
	Within Groups	1790.24	2.40	
	Total	1856.60		
Survey Question 28	Between Groups	73.91	24.64	11.58**
	Within Groups	1584.95	2.13	
	Total	1658.87		
Survey Question 29	Between Groups	120.02	40.01	18.08**
	Within Groups	1648.27	2.21	
	Total	1768.29		
Survey Question 30	Between Groups	134.40	44.80	18.81**
	Within Groups	1774.47	2.38	
	Total	1908.87		
Survey Question 31	Between Groups	485.20	161.73	52.78**
	Within Groups	2282.86	3.06	
	Total	2768.06		

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$df = 3, 745$

\*  $p < .05$

\*\*  $p < .001$

Table J3 - Significant Differences in Organizational Level Group Mean Response Scores

Dependent Variable	Organizational Level 1	Organizational Level 2	Mean Difference (1- 2)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Survey Question 7a	Executive Management	Section / Clinic Employee	0.90	0.18	0.00	0.64	1.16
	ACoS / Dept Head	Section / Clinic Employee	0.47	0.11	0.00	0.21	0.72
	Section / Clinic Head	Section / Clinic Employee	0.44	0.11	0.00	0.16	0.72
	Executive Management	ACoS / Dept Head	0.43	0.20	0.00	0.16	0.71
Survey Question 7b	Executive Management	Section / Clinic Employee	0.77	0.18	0.00	0.46	1.09
	ACoS / Dept Head	Section / Clinic Employee	0.45	0.11	0.00	0.20	0.70
	Section / Clinic Head	Section / Clinic Employee	0.40	0.11	0.00	0.12	0.68
	Executive Management	Section / Clinic Head	0.37	0.19	0.03	0.02	0.73
Survey Question 7c	Executive Management	Section / Clinic Employee	0.65	0.22	0.00	0.19	1.12
	ACoS / Dept Head	Section / Clinic Employee	0.39	0.13	0.01	0.06	0.71
Survey Question 8	ACoS / Dept Head	Section / Clinic Employee	0.52	0.14	0.00	0.17	0.87
	Executive Management	Section / Clinic Employee	0.90	0.23	0.00	0.31	1.50
	Section / Clinic Head	Section / Clinic Employee	0.47	0.14	0.00	0.13	0.81
Survey Question 9	ACoS / Dept Head	Section / Clinic Employee	0.90	0.14	0.00	0.56	1.23
	Executive Management	Section / Clinic Employee	1.34	0.23	0.00	0.88	1.79
	Section / Clinic Head	Section / Clinic Employee	0.76	0.14	0.00	0.39	1.13
	Executive Management	Section / Clinic Head	0.58	0.25	0.02	0.07	1.08
Survey Question 10	ACoS / Dept Head	Section / Clinic Employee	0.79	0.14	0.00	0.46	1.12
	Executive Management	Section / Clinic Employee	1.19	0.23	0.00	0.73	1.66
	Section / Clinic Head	Section / Clinic Employee	0.60	0.14	0.00	0.24	0.97
	Executive Management	Section / Clinic Head	0.59	0.24	0.02	0.07	1.11
Survey Question 11	Executive Management	Section / Clinic Employee	1.07	0.24	0.00	0.50	1.64
	ACoS / Dept Head	Section / Clinic Employee	0.50	0.15	0.00	0.13	0.87
	Section / Clinic Head	Section / Clinic Employee	0.45	0.14	0.01	0.07	0.83
Survey Question 12	ACoS / Dept Head	Section / Clinic Employee	0.73	0.14	0.00	0.39	1.08
	Executive Management	Section / Clinic Employee	1.38	0.23	0.00	0.87	1.88
	Executive Management	Section / Clinic Head	0.92	0.25	0.00	0.36	1.48
	Section / Clinic Head	Section / Clinic Employee	0.46	0.14	0.01	0.08	0.83
	Executive Management	ACoS / Dept Head	0.64	0.25	0.01	0.10	1.18
Survey Question 13	ACoS / Dept Head	Section / Clinic Employee	0.66	0.12	0.00	0.34	0.98
	Executive Management	Section / Clinic Employee	1.15	0.21	0.00	0.63	1.67
	Section / Clinic Head	Section / Clinic Employee	0.54	0.12	0.00	0.22	0.86
	Executive Management	Section / Clinic Head	0.61	0.22	0.03	0.05	1.17
Survey Question 14	ACoS / Dept Head	Section / Clinic Employee	0.66	0.12	0.00	0.35	0.98
	Executive Management	Section / Clinic Employee	1.20	0.20	0.00	0.68	1.72
	Section / Clinic Head	Section / Clinic Employee	0.55	0.12	0.00	0.22	0.87
	Executive Management	Section / Clinic Head	0.65	0.22	0.02	0.09	1.21
Survey Question 15	Executive Management	Section / Clinic Head	0.74	0.25	0.02	0.11	1.38
	Executive Management	Section / Clinic Employee	0.62	0.24	0.03	0.04	1.20
Survey Question 18	Executive Management	Section / Clinic Employee	0.85	0.24	0.00	0.26	1.45
	ACoS / Dept Head	Section / Clinic Employee	0.44	0.14	0.01	0.09	0.79
	Executive Management	Section / Clinic Head	0.70	0.25	0.03	0.05	1.34

Dependent Variable	Organizational Level 1	Organizational Level 2	Mean Difference (1- 2)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Survey Question 20	Executive Management	Section / Clinic Employee	1.09	0.22	0.00	0.62	1.56
	Executive Management	Section / Clinic Head	0.99	0.23	0.00	0.46	1.51
	ACoS / Dept Head	Section / Clinic Employee	0.43	0.13	0.01	0.10	0.76
	Executive Management	ACoS / Dept Head	0.67	0.23	0.01	0.15	1.18
Survey Question 21	ACoS / Dept Head	Section / Clinic Employee	0.58	0.13	0.00	0.27	0.89
	Executive Management	Section / Clinic Employee	0.81	0.21	0.00	0.32	1.30
	Section / Clinic Head	Section / Clinic Employee	0.42	0.13	0.00	0.11	0.74
Survey Question 22	ACoS / Dept Head	Section / Clinic Employee	0.69	0.14	0.00	0.37	1.02
	Executive Management	Section / Clinic Employee	1.05	0.23	0.00	0.50	1.60
	Executive Management	Section / Clinic Head	0.72	0.25	0.01	0.13	1.31
Survey Question 23	Section / Clinic Head	Section / Clinic Employee	0.82	0.16	0.00	0.42	1.23
	ACoS / Dept Head	Section / Clinic Employee	0.69	0.16	0.00	0.30	1.09
	Executive Management	Section / Clinic Employee	1.00	0.26	0.00	0.39	1.61
Survey Question 24	ACoS / Dept Head	Section / Clinic Employee	1.02	0.14	0.00	0.71	1.34
	Executive Management	Section / Clinic Employee	1.28	0.23	0.00	0.78	1.77
	Section / Clinic Head	Section / Clinic Employee	0.71	0.14	0.00	0.36	1.06
	Executive Management	Section / Clinic Head	0.56	0.25	0.03	0.03	1.09
Survey Question 25	ACoS / Dept Head	Section / Clinic Employee	1.08	0.16	0.00	0.70	1.46
	Executive Management	Section / Clinic Employee	1.48	0.26	0.00	0.93	2.04
	Executive Management	Section / Clinic Head	1.02	0.28	0.00	0.40	1.64
	ACoS / Dept Head	Section / Clinic Head	0.62	0.19	0.01	0.14	1.10
	Section / Clinic Head	Section / Clinic Employee	0.46	0.16	0.03	0.03	0.89
Survey Question 26	ACoS / Dept Head	Section / Clinic Employee	0.99	0.15	0.00	0.62	1.35
	Executive Management	Section / Clinic Employee	1.63	0.24	0.00	1.15	2.12
	Executive Management	Section / Clinic Head	1.09	0.26	0.00	0.55	1.63
	Section / Clinic Head	Section / Clinic Employee	0.55	0.15	0.00	0.16	0.93
	Executive Management	ACoS / Dept Head	0.65	0.26	0.01	0.12	1.17
	ACoS / Dept Head	Section / Clinic Head	0.44	0.17	0.05	0.00	0.88
Survey Question 27	Executive Management	Section / Clinic Employee	1.11	0.24	0.00	0.57	1.65
	Executive Management	Section / Clinic Head	0.84	0.26	0.00	0.23	1.46
	ACoS / Dept Head	Section / Clinic Employee	0.49	0.15	0.01	0.11	0.87
	Executive Management	ACoS / Dept Head	0.62	0.26	0.04	0.02	1.21
Survey Question 28	Executive Management	Section / Clinic Employee	1.10	0.23	0.00	0.59	1.60
	ACoS / Dept Head	Section / Clinic Employee	0.57	0.14	0.00	0.20	0.93
	Executive Management	Section / Clinic Head	0.74	0.25	0.01	0.17	1.31
Survey Question 29	ACoS / Dept Head	Section / Clinic Employee	0.86	0.14	0.00	0.52	1.19
	Executive Management	Section / Clinic Employee	1.04	0.23	0.00	0.53	1.55
	Section / Clinic Head	Section / Clinic Employee	0.62	0.14	0.00	0.25	0.99
Survey Question 30	ACoS / Dept Head	Section / Clinic Employee	0.88	0.15	0.00	0.52	1.25
	Executive Management	Section / Clinic Employee	1.22	0.24	0.00	0.65	1.79
	Section / Clinic Head	Section / Clinic Employee	0.59	0.15	0.00	0.20	0.98
	Executive Management	Section / Clinic Head	0.63	0.26	0.04	0.01	1.25
Survey Question 31	ACoS / Dept Head	Section / Clinic Employee	1.77	0.17	0.00	1.37	2.17
	Section / Clinic Head	Section / Clinic Employee	0.95	0.17	0.00	0.52	1.38
	Executive Management	Section / Clinic Employee	2.24	0.28	0.00	1.62	2.87
	Executive Management	Section / Clinic Head	1.29	0.30	0.00	0.62	1.97
	ACoS / Dept Head	Section / Clinic Head	0.82	0.20	0.00	0.35	1.29